

# AMERICAN JOURNAL OF ARCHAEOLOGY

THE JOURNAL OF THE  
ARCHAEOLOGICAL INSTITUTE  
OF AMERICA



SECOND SERIES 1931  
VOLUME XXXV  
NUMBER FOUR

*Concord*  
PUBLISHED QUARTERLY BY THE INSTITUTE  
*The Rumford Press*



## *Contents*

VEILED LADIES

*Caroline M. Galt* 373

THE GREEK STOA NORTH OF THE TEMPLE AT CORINTH

PLATE VI

*Ferdinand Joseph de Waele* 394

THE EXCAVATION OF ROMAN CHAMBER TOMBS AT CORINTH  
IN 1931

*Theodore Leslie Shear* 424

A PORTRAIT OF CARACALLA IN CORINTH

*Ess Askew* 442

ARCHAEOLOGICAL DISCUSSIONS

448

NEWS ITEMS FROM ATHENS

477

BOOK REVIEWS

480





VEILED LADIES<sup>1</sup>

THE secluded life led by Greek women of the Hellenic period has long been recognized. All handbooks agree that women, as mistresses of their homes, spun wool and linen into thread, wove cloth, and made garments for themselves and their families, superintended the cooking and preparing of meals, although the master of the house, or a slave trained as a steward did the marketing each day. To women also were entrusted the care and instruction of the children,—of girls until they married, and of boys until they went to school. And after enumerating with varying completeness the household tasks which always have devolved upon women as home makers, the handbooks close their discussion of the daily life of women with such statements as the following: "In Athens, and probably more or less throughout the Greek world, a woman's life was rather monotonous. Ladies did not go out unattended, and indeed were not expected to go out at all without good reason,"<sup>2</sup> or "... married life (for the woman) would be regarded in these days as extremely monotonous. During her younger years, at least, she will be kept much within doors. If she goes out, it will be theoretically with her husband's consent, and accompanied by a female attendant."<sup>3</sup> "The life of married women, maidens, children while in the care of women, and of female slaves, passed in the *gynaikonitis*, from which they issued only on rare occasions."<sup>4</sup> "There were occasions on which women might appear out of doors without losing reputation, and married women had some duties and amusements outside the house. They took part in certain religious services and processions. They were admitted to the theatre when tragedies were performed; and in some parts of Greece they frequented the public baths. They sometimes went marketing, attended by a servant, and paid visits to each other at luncheon time and in the morning or afternoon. Unmarried women also took part in religious rites such as the *ἀρρηφωρία* and the Panathenaic procession."<sup>5</sup> In no handbook, so far examined, does there seem to be the statement that when married women appeared in public

<sup>1</sup> This paper was read at a meeting of the Classical Association of New England held at Yale University, New Haven, on April 4 and 5, 1930.

<sup>2</sup> H. McClees, *The Daily Life of the Greeks and Romans* as illustrated by the Classical Collections in the Metropolitan Museum of Art, 1924, p. 38.

<sup>3</sup> T. G. Tucker, *Life in Ancient Athens*, 1907, p. 109.

<sup>4</sup> Guhl and Koner, *The Life of the Greeks and Romans*, trans. by F. Hueffer, 1889, p. 185.

<sup>5</sup> L. Whibley, *A Companion to Greek Studies*, 1905, p. 521.

their faces were veiled up to the eyes. The writer of this paper proposes a re-examination of archaeological evidence in an attempt to prove that what is now regarded as an "oriental" custom was the prevailing custom in Athens and possibly throughout Greece.

The motive which underlay this restriction of women, *viz.*, the desire on the part of husbands to hide a possession from the gaze of other men, is implicit in Plutarch, *Moralia*,<sup>1</sup> 232 C πυνθανομένου δέ τινος διὰ τί τὰς μὲν κόρας ἀκαλύπτας, τὰς δὲ γυναῖκας ἐγκεκαλυμμένας εἰς τοῖς φανέσιν ἄγουσιν, ὅτι, ἔφη, τὰς μὲν κόρας, ἄνδρας εὐρεῖν δεῖ· τὰς δὲ γυναῖκας, σφῆξιν τοὺς ἔχοντας.

My attention was first called to this problem by the heavily veiled



FIGURE 1. KRATER, MOUNT HOLYOKE COLLEGE

appearance of the five women shown on a fifth-century krater in the art collection of Mount Holyoke College (Fig. 1). It will be seen that three swathed ladies are dancing together on the obverse of the vase, and two more are dancing with fluttering garments on the reverse. Between the latter is the sixth woman who furnishes music for all as she plays on the double flute. All but the musician have drawn their mantles (*himatia*) from over their heads in front of their faces until only their eyes and the upper parts of their faces are visible.

Heydemann<sup>2</sup> once proved that there was a "mantle dance" when he published two veiled dancing figures in bronze in the museum in Turin. Figure 2 shows one of them. He gave the name "mantle

<sup>1</sup> The writer is indebted to Professor Frank Babbitt for this reference.

<sup>2</sup> Viertes Hallisches Winckelmanns programm 1879, Heydemann, *Verhüllte Tänzerin, Bronze im Museum zu Turin*.

dance"<sup>1</sup> to a dance which is known only through representations in ancient art. No name applicable to, or descriptive of it has been found in literature. In his article, Heydemann cited fifty illustrations from reliefs, mural paintings, vase paintings, terra cotta statuettes, and incised drawings on bronze cistae and mirrors, from which he drew the following conclusions:

1. That the mantle dance was without exception danced by women.

a. In the majority of cases, hetairae are represented, but

b. Often married women danced thus for the entertainment of their husbands, or in honor of Artemis.

2. The artistic type was extended to represent

a. Maenads dancing in honor of Adonis.

b. Nymphs dancing in honor of Pan or Dionysos.

3. It was danced to the music of the flute, the castanets, the syrinx, and the lyre.

4. It was danced as a solo dance or by groups of three, where, as in the Mount Holyoke representation, the central figure seems to dance first to one companion and then to the other, each of whom dances in a restricted area.

The majority of Heydemann's illustrations belong to the third century and later, but a few, notably terra cottas and vase paintings, are to be dated in the fourth century B.C. Heydemann concluded that the seven types of artistic representation into which his illustrations could be grouped went back to Attic art of the middle of the fourth century, and that, if they went back to a common original, in all probability, this would be a creation of one of the famous artists of the period.

Heydemann even suggested that it was not too fanciful to think



FIGURE 2. BRONZE RELIEF, TURIN. After Viertes Hallisches Winckelmanns programm, Fig. 1

<sup>1</sup> Cf. "Dances with the Mantle," M. Emmanuel, *The Antique Greek Dance*, trans. by H. J. Beuley, 1916, p. 179, where steps and accompanying gestures with the mantle as a veil are illustrated.

that the closely veiled type might have originated in some statue by Praxiteles made as a concession to the reaction against his daring experiment in making an undraped Aphrodite. In support of this hypothesis, he cited the fact that Pliny the Elder says that Praxiteles also made a draped Aphrodite which the people of Cos preferred as being more chaste and severe.

Two terra cotta statuettes in the Museum of Fine Arts in Boston (Fig. 3) representing veiled dancing women are more convincing



FIGURE 3. TERRA COTTA STATUETTES, BOSTON.  
Courtesy of the Museum of Fine Arts, Boston

illustrations of the "mantle dance" than any cited by Heydemann. Furtwaengler said in regard to a similar figure in the Sabouroff Collection that the original of the type was to be sought in the province of the painter rather than in the province of the sculptor, and also that it was not unlikely that the type was created toward the end of the fifth century, although most of the examples came from later art.<sup>1</sup>

<sup>1</sup> Mr. Caskey kindly gave me permission to publish the photograph of these terra cotta statuettes representing dancers, and generously gave me the following information from the Museum's archives: The one to the left (01.7923) was "bought in Athens. From Corinth." The one to the right (01.7924) was bought in Munich. Both are labelled tentatively "Corinthian (?)." An example in

The Mount Holyoke krater, then, illustrates the form of the "mantle dance," where women danced in groups of three with swaying draperies adding an air of *coquetterie* and giving long graceful lines much as the modern scarf dance does.<sup>1</sup> Made as it was in the Periclean period,<sup>2</sup> it carries the origin of this dance almost a century farther back than Heydemann placed it and confirms Furtwaengler's dating of the type of veiled dancers. It follows also that the fashion of heavy veiling, even to the extent of covering the lower part of the face, did not arise in protest to any prevailing tendency in art to represent the nude figure of woman. Instead of Heydemann's theory of its origin is offered the theory that it represents the prevailing fashion of women's dress in public when women were always more heavily swathed on the streets than has been realized.

One looks in vain for confirmation of this theory in sculpture in the round, because Greek taste did not permit the noblest part of a statue to be so subordinated.<sup>3</sup> Figures 4 and 5 show women dressed

the Sabouroff Collection is from Thisbe, Plate CXXXIX. (See Furtwaengler's remark translated above.) Winter, *Die Typen der figürlichen Terrakotten*, vol. II, pp. 145 ff., publishes a number of examples, which seem to show that the type occurs almost all over the Greek world. A good many seem to be from Boeotia. The Boston Museum has also a third example, of the type (01.7922), which was bought in London.

<sup>1</sup> Cf. M. Emmanuel, *op. cit.* Translator's Foreword, p. XIV: "All of the gestures had a concrete significance, becoming symbolic with the passing of time. . . . The gesture of the veil is so beautiful that it has never fallen into disuse, dancers in all times recognizing its decorative value, even after the meaning has been lost. In the decadent period of Greek art the veil gestures were used as they have been by certain modern dancers, more to emphasize nudity than to conceal it, thus perverting the original expression, which was one of modesty." And p. 26: "*Gesture of the Veil.* The ample Greek dress permitted a woman wearing it to make of it, at pleasure, a dress, a cloak, or a veil, because it was simply a long piece of cloth. The gesture of the veil is made by turning the head to the side while covering the head and shoulders with the fabric. In the fifth and fourth centuries, the intention of the gesture is, above all, to express modesty; the veil is a mobile wall behind which a woman takes refuge. . . . The Aphrodite Genetrix of Myrina (17) is a fourth-century B.C. type, and shows an early concept of the veil-gesture; she is a chaste goddess, who protects herself from too close scrutiny. But in the third century B.C. the veil ceased to be a barricade behind which to hide; the drapery of the Hellenistic Aphrodite is most of it removed,—it is only used to emphasize the nudity."

<sup>2</sup> The krater is attributed to the Polygnotan studio and is to be dated c. 440–430 B.C. because of its resemblance to a krater in the Metropolitan Museum of Art which shows the influence of Parthenon sculptures.

<sup>3</sup> The same insistence on showing the face is seen in the case of helmeted heads of men. The "Leonidas" head found at Sparta in 1925, with the cheekpieces in place, is an exception proving the rule that the helmet was pushed back, as in the Cressilas head of Pericles, or at least the cheekpieces were raised in order to show the face clearly. Two explanations may be offered for the fact that there is less of this idealization in bronze statuettes of helmeted men (v. K. A. Neugebauer, *Antike Bronzestatuetten*, 1921, fig. 21; W. Lamb, *Greek and Roman Bronzes*, 1929, pls. XV, c and d; XXVIII, a and b; Rayet, *Monuments de l'Art Antique*, I, pl. 17). (1) Statuettes, whether of bronze or terra cotta, being less costly as well as being made often for less pretentious purposes, show a much more realistic treatment of

for the street with their himatia drawn over their heads, and with thick rolls of the material ready to be drawn up over their faces. My theory is that artists went this far in realistic representation, and no farther.

In discussing the habit of wearing a fold of the himation as a covering for the head out of doors, most of the handbooks mention



FIGURE 4. STATUE  
FOUND AT LAPPA, CRETE.  
After *The Illustrated  
London News*, Oct. 12,  
1929



FIGURE 5. TERRA COTTA  
STATUETTE, NEW YORK.  
Courtesy of the Metropolitan  
Museum of Art

that the face also was often partly covered, but usually with the implication that the lady in such a case is a bride,<sup>1</sup> or is muffling

their subjects. (2) All of the statuettes cited above are early in date; later sculptors improved upon the warrior type by more ideal treatment, even when representing warriors in action, as in the Aeginetan pediments.

<sup>1</sup> Literary, as well as archaeological, evidence attests the complete veiling of the bride's face, e.g., Aesch. *Agam.* 11.1178-9 . . . οὐκ ἐκ καλυμμάτων ἔσται δεδωρκώς νεογάμου νόμης δίκην; Eurip. *Iph. in T.* 11.372-3, ἐγὼ δὲ λεπτῶν ὄμμα διὰ καλυμμάτων ἔχουσ'; the painting known as the Aldobrandini Wedding, ably discussed by Miss Swindler (*Ancient Painting*, 1929, pp. 329 ff., fig. 531), and Miss Toynbee's interpretation of the frescoes of the Villa Item, in Pompeii (*J. Rom. St.* XIX, 1929, Part I, pp. 67 ff., "The Villa Item and a Bride's Ordeal").

her face in deep grief or as a protection from the cold, or that the covering of the mouth and cheeks is in some way unusual. A few of these statements follow: "Ladies out of doors covered the head with a fold of the himation."<sup>1</sup> "Both men and women wore the himation in a similar manner" (*viz.*, enveloping the body; and in explanation of a terra cotta statuette of a lady heavily swathed in her himation), "The complete covering even of the face, in this figure indicates a chastely veiled Athenian lady walking in the street, or, according to Stackelberg, a bride. . . . The headdress of Athenian ladies at home and in the street consisted, beyond the customary veil, chiefly of different contrivances for holding together their plentiful hair. We mentioned before that the himation was sometimes pulled over the back of the head like a veil. But at a very early period Greek women wore real shorter or longer veils, called *κρήδεμνον*, *καλύπτρα*, or *κάλυμμα*,<sup>2</sup> which covered the face up to the eyes, and fell over the neck and back in folds, so as to cover, if necessary, the whole upper part of the body."<sup>3</sup> "Der drappierte Mantel kann (a) symmetrisch umgelegt werden. In diesem Fall wird er entweder (1) über Kopf und Schultern oder (2) nur über die Schultern gehängt. . . . Am häufigsten wird der Mantel (b) unsymmetrisch umgelegt. . . . Man kann den oberen Mantelrand um die rechte Hüfte führen, . . . sodass beide Schultern verhüllt sind, und auch den Kopf mit bedecken."<sup>4</sup> No reference to the veiling of the face by women is made in Fraülein Bieber's discussion of women's garments, but in the section dealing with the form of, and manner of wearing the himation for men, this statement occurs, "Dagegen liegt der Mantel auf dem Kopf nicht als Tracht, sondern nur als Zeichen der Trauer, um das Gesicht zu verhüllen."<sup>5</sup> And under the title, *Kopfbedeckungen*, Fraülein Bieber says, "Die Frauen bedecken ihr Haupt, wenn überhaupt, meistens mit dem obersten hinteren Teil ihres Mantels oder mit dem hinteren Teil des Überschlags ihres Peplos. Selten wird ein besonderes Kopftuch, ein Kredemnon, getragen. Dieses bedeckt dann meistens auch die Schultern."<sup>6</sup> "The himation was similar to that worn by the men and was used as an outside wrap over the chiton. It was often pulled up to cover the head to take the place of a hat, in the manner that an Italian or Greek woman of today would use her shawl when going out of doors."<sup>7</sup>

<sup>1</sup> Lady Evans, *Chapters on Greek Dress*, 1893, p. 74.

<sup>2</sup> An excellent example of this short veil is seen on the Hestia Giustiniani in the Torlonia Collection, Rome, Brunn-Bruckmann, *Denkmaeler*, pl. 491.

<sup>3</sup> Guhl and Koner, *op. cit.*, pp. 166, 174-5.

<sup>4</sup> M. Bieber, *Griechische Kleidung*, 1928, p. 22.

<sup>5</sup> *Ibid.*, p. 24.

<sup>6</sup> *Ibid.*

<sup>7</sup> G. M. A. Richter, *The Sculpture and Sculptors of the Greeks*, 2nd edit., 1930, p. 91.



Heuzey<sup>1</sup> in his discussion of ancient dress discusses the peplos open on the right side and closed, and says that each is found on monuments with a fold drawn over the head, but he says nothing about the covering of any part of the face.<sup>2</sup>

It will be observed from the statements given above that the wearing of a fold of the himation over a part of the face has been interpreted as an occasional rather than an habitual fashion.

While there are no sculptures in the round representing women with their faces partly covered, a bronze in the Louvre (Fig. 6) shows a girl in the act of drawing with her right hand the back fold of her peplos over her face or, more probably, of removing it from before her face.<sup>3</sup> The phiale in her left hand undoubtedly puts this figure in the group of women veiling or unveiling their faces in a religious act. Quite similar is the gesture of the Aphrodite<sup>4</sup> from Tarquinia, now in Berlin, dating from the latter half of the fifth century B.C. And the grave stele of Polyxena, found in Boeotia and also in Berlin, seems to be a variant of this type, *i.e.* with the apotygma of the peplos not being held by the hand, transferred to relief. The type of figure, as well as the design of the drapery, shows the influence of the Parthe-



FIGURE 6. BRONZE STATUETTE,  
LOUVRE.

After Heuzey, *Histoire du Costume Antique*, Fig. 93

non sculptures and so dates it in the latter part of the fifth century B.C.

Statues in the round, funereal, but not otherwise ritualistic, often represent women wrapped in mantles either with a fold worn over

<sup>1</sup> L. Heuzey, *Histoire du Costume Antique*, 1922, chap. V.

<sup>2</sup> In his study of the "Domestic Costumes of the Athenian Woman in the Fifth and Fourth Centuries B.C.," in *A.J.A.*, vol. XXVI (1922), pp. 410 ff., A. W. Barker has not included a description of the himation.

<sup>3</sup> The bronze statue of a dancing girl (so interpreted) from Herculaneum, now in the Museo Nazionale, Naples, illustrates the drawing forward the back part of the apotygma of the peplos, Brunn-Bruckmann, *Denkmaeler*, pl. 295, 3.

<sup>4</sup> Arndt-Brunn-Bruckmann, *Denkmaeler*, pl. 673, left-hand figure.



the head or merely around the shoulders, usually with the right hand holding a mass of the cloth as though ready to draw it up over the lower part of the face. In the fifth-century examples the himation is of heavy material falling in long, simple folds, and with the extra fold brought rather closely around the neck under the chin, as in the reconstructed standing figure in Berlin, formerly called *Aspasia*.<sup>1</sup> An excellent copy (Fig. 4) of the lost early fifth-century original was discovered in 1929 on the site of Lappa in Crete, and is now in the museum at Retimo. Other standing draped figures, also pre-



FIGURE 7. CHRYSAPHA STELE, BERLIN.  
After Collignon, *Histoire de la Sculpture  
Grecque*, I, Fig. 111

sumably funereal, by the variety and complexity of folds of the himation indicate increasing luxury of softer materials as well as increasing skill of sculptors in representing drapery. In many of

<sup>1</sup> Compare R. Kekule von Stradonitz, *Die Griechische Skulptur* (in *Handbücher der Königlichen Museen zu Berlin*), 1907, pp. 142-4, where Kekule refers to it as, "Die Frau, ohne Zweifel eine Göttin, . . ."; also Collignon, *op. cit.*, pp. 115 ff., ". . . Que représente cette figure? Est-ce une déesse, une Déméter voilée? Tout en inclinant vers cette hypothèse, M. Amelung y reconnaît comme un caractère 'domestique' et privé qui ferait également songer à une mortelle. Et en effet, à la manière dont elle se drape strictement dans son manteau, on croirait voir une de ces fiancées que les peintres de vases représentent dans les scènes nuptiales," and as footnote: "Cf. *Wiener Vorlegeblätter*, 1888, pl. 8, 1, 9, 3. M. Studniczka reconnaît justement dans la statue qui nous occupe une fiancée plutôt qu'une Déméter. . . ."

them the lady still grasps with her right hand the excess material which the sculptor has chosen not to use in hiding her face. The so-called matron<sup>1</sup> and maiden<sup>2</sup> from Herculaneum in Dresden illustrate fourth-century varieties of this use of the himation.

In comparison with marble statues, or even bronze statuettes, terra cotta statuettes<sup>3</sup> were inexpensive and coroplasts were not under the restraint of idealizing their subjects to the same extent that makers of more important works were. Most museums have one or more of the graceful terra cotta ladies with their faces



FIGURE 8. METOPE FROM SELINUS, PALERMO.  
After Collignon, *Histoire de la Sculpture Grecque*, I. Fig. 213

partially covered by a fold of the himation (Fig. 5).<sup>4</sup> Many of these figures certainly represent dancing women, as in Figure 4, but by no means is this true of all the women represented as veiled. M. Pottier,<sup>5</sup> who edited Heuzey's manuscript, says that it did not include a discussion of the draperies of terra cotta statuettes,

<sup>1</sup> Brunn-Bruckmann, *Denkmäler*, pl. 310.

<sup>2</sup> *Ibid.*, pl. 558.

<sup>3</sup> While this article was being written, Professor D. M. Robinson sent the writer a photograph of a moulded terra cotta vase, found during his excavations at Olynthos, in the form of the head and shoulders of a woman with her himation drawn closely over her head and face with only the eyes uncovered. In his accompanying letter Professor Robinson said that he had found at Olynthos many terra cotta veiled ladies, "one or two of them in the form of a vase. Others seem to be dancing figures." They are published in his volume, *The Terra Cottas Found at Olynthos*, 1931.

<sup>4</sup> *Bull. Met. Mus.* XXV.

<sup>5</sup> Heuzey, *op. cit.*, p. 220.

although it was very clear that he intended to discuss them because he had had drawings of them made for illustration. To fill the lacuna, M. Pottier comments briefly on the well-known types of figurines, calling special attention to the more luxurious habits implied by the soft, clinging materials in contrast to the stiffer, heavier, woollen materials represented by most of the monuments of the fifth century. And M. Pottier describes the veiling of the face



FIGURE 9. DETAIL FROM THE PARTHENON FRIEZE.  
After Heuzey, *Histoire du Costume Antique*, Fig. 96

as though it were a muffling of the head to keep the ears and cheeks from the cold,—an interpretation from far too northern an angle, as the writer of this article believes.

Greater freedom of design was also always more possible in reliefs than in sculpture in the round, and there are to be found far more examples of what may be called "gesture of the veil" in this technique. From my point of view the argument is in no way weakened by the fact that in some instances the heroized dead, and, in others, a goddess is represented, because it is a commonplace that in their art the Greeks chose to represent the gods and the dead in

the daily habit of living mortals. In all the reliefs there is no question but what the polychromy of their original state made the veil far more conspicuous than it is at present.

The earliest clear instance from the Hellenic period is the unveiling of the matron's face in a sepulchral relief (Fig. 7), dating from the sixth century B.C., found near Sparta and now in Berlin. The woman's left hand has pulled far away from her face an enveloping mantle. The gesture is often disregarded by students, in looking at a cast or a photograph, but if the mantle were seen in the bright color of the original, this interpretation would force itself upon the attention. Four other reliefs<sup>1</sup> from the Peloponnese dating from the late sixth or early fifth century show the same gesture.

Hera does not wear her himation drawn over her head in the "Induction pediment" which Dickins<sup>2</sup> regards as contemporary with the François vase, and datable about 550 B.C., but within seventy-five years the unveiling of Hera before Zeus had become a recognized artistic type, as may be seen from a metope from Selinus now in Palermo (Fig. 8). And in the second half of the fifth century Phidias showed the gesture in his beautiful Hera (Fig. 9) in the assembly of the gods in the frieze over the east door of the Parthenon.<sup>3</sup>

Other fifth-century examples of the face outlined against a slack fold of the himation are to be seen in the "matron"<sup>4</sup> (or "bride") on one end of the Ludovisi triple relief, and in the "Aphrodite" and "Persephone" on the back<sup>5</sup> of the Boston relief. Orpheus may be interpreted as holding the veil away from the face of Eurydice in the pathetic scene on the relief<sup>6</sup> in Naples. Peitho holds a fold from off her face with her left hand in the fourth-century relief in Naples showing Aphrodite persuading Helen to go away with Paris; and in the same scene Aphrodite's himation has to the right of her face a slack fold which could be brought to cover her face in case of need.

The Lansdowne Stele of the late fifth century, recently acquired

<sup>1</sup> M. N. Tod and A. J. B. Wace, *Catalogue of the Spartan Museum*, 1906, pp. 102-111, figs. 2, 3, 12, and 13.

<sup>2</sup> G. Dickins, *Catalogue of the Acropolis Museum*, vol. I, 1912, pp. 62-67.

<sup>3</sup> Cf. A. S. Murray, *The Sculptures of the Parthenon*, 1903. In his description on page 91, Murray says, "On his (Zeus') right sits his consort Hera. The veil over the back of her head shows that she is a wife. Her action in pulling it aside means, no doubt, that she is taking a lively interest in what is transpiring." And again, on page 103, "Hera . . . is excited, pulling aside her veil with both hands." That there is no other figure in the whole frieze wearing a veil seems to be archaeological evidence that there were no matrons, only maidens in the procession.

<sup>4</sup> *Antike Denkmäler*, II, pl. 7.

<sup>5</sup> *Ibid.*, III, pl. 7.

<sup>6</sup> Brunn-Bruckmann, *Denkmäler*, pl. 341a.

by the Metropolitan Museum of Art (Fig. 10),<sup>1</sup> shows the himation falling away from the face, but is too fragmentary to show whether or not it was being held away from the face by the right hand of the seated lady. The following grave reliefs of the fourth century in the National Museum in Athens are cited to show that by this time the gesture of holding the veil from before the face, either removing it or drawing it over, may be said to have become a "studio pose": Stele of Phanarete,<sup>2</sup> Stele from Peiraeus,<sup>3</sup> Stele of Damasistrata,<sup>4</sup>



FIGURE 10. LANSDOWNE STELE, NEW YORK.  
Courtesy of the Metropolitan Museum of Art

and the Stele of Procleis and Procleides.<sup>5</sup> The Stele of Demetria and Pamphilia still *in situ* in the cemetery of the Ceramicus offers two good illustrations of the gesture.<sup>6</sup> In many of these reliefs<sup>7</sup> the

<sup>1</sup> *Bull. Met. Mus.* XXV, 1930, 10, p. 218. Miss Richter says that "presumably the girl was not married, since no husband is mentioned" in the inscription giving her name.

<sup>2</sup> V. Stais, *Guide Illustré*, 2nd edit., 1910, p. 116, no. 724, possibly to be dated in the late fifth century.

<sup>3</sup> *Ibid.* p. 140, no. 819.

<sup>4</sup> *Ibid.* p. 124, no. 743.

<sup>5</sup> *Ibid.* p. 120, no. 737.

<sup>6</sup> Cf. M. Collignon, *Les Statues Funéraires*, 1911, p. 174, fig. 103.

<sup>7</sup> Other illustrations of the veiling or unveiling gesture are on the following stelae: Stais, *op. cit.*, nos. 753, 820, 821, 1016, 1020 and 1028. Stelae showing a woman dressed in himation with the head covered but lacking the gesture of drawing it over the face are: nos. 718, 819, 822 and 832. A veiled woman seated at the funeral banquet in honor of her husband is shown on no. 1025. Farewell scenes cut in low relief on marble funeral lekythoi often have examples of unveiling of the face as: *ibid.*, no. 951; cf. P. Gardner, *Sculptured Tombs of Hellas*, p. 179,

idea of the wife or mother, seated or standing, about to leave the home gives significance to the gesture of drawing up the mantle. And the sepulchral figure from Acharnae (Fig. 11) in Lowther Castle



FIGURE 11. STELE FROM ACHARNAE,  
LOWTHER CASTLE.

After Conze, *Die Attischen Grabreliefs*,  
Pl. CXV

in England is but another matron sitting clothed as though about to go out upon the street.

Demeter and Persephone are not represented wearing veils over their heads in the early fifth-century relief<sup>1</sup> from Eleusis in the National Museum at Athens, but in the fourth-century statue<sup>2</sup> found at Cnidus and generally accepted as a statue of Demeter mourning the loss of her daughter, Demeter is enveloped in an ample himation which has been drawn up over her head although not over her face. A fragmentary relief<sup>3</sup> at Eleusis also shows Demeter with her head covered and possibly with the himation only just drawn from before her face. Persephone<sup>4</sup> (as she is usually recognized) in a fresco on the ceiling of a tomb in the Crimea holds a fold of her mantle (arranged

over the back of her head) with her raised left hand.

fig. 71; Richter, *op. cit.*, fig. 495. The lekythos of Kallias in the Museum of Fine Arts, Boston, shows a matron holding a fold of her himation on her left shoulder, but the mantle has slipped off the back of her head and forms a graceful curving mass around her neck; cf. L. D. Caskey, *Catalogue of Greek and Roman Sculpture*, 1925, pp. 57, 58, with illustrations. The many stelae and other reliefs showing a woman putting on or otherwise adjusting her mantle over her shoulders only, of which the later sculptured drum from Ephesus with the figure of "Alcestis" in this pose is an outstanding example, are omitted as not pertinent to the argument.

<sup>1</sup> Stais, *op. cit.*, p. 27, no. 126.

<sup>2</sup> A. H. Smith, *Catalogue of Sculpture*, British Museum, 1900, no. 1300.

<sup>3</sup> Cited by Miss Richter, *op. cit.*, p. 151, with footnote 116, fig. 461, for its traces of color, . . . "yellow on the veil of Demeter," on the authority of Rodenwaldt, *Jahrb. Arch. I.* 1921, pp. 4 ff., pl. 1.

<sup>4</sup> Described by E. H. Minns, *Scythians and Greeks*, 1913, p. 307, "behind (her head) fell a light and dark red veil."

The Sarcophagus<sup>1</sup> of the Mourning Women in Constantinople shows many examples of the gesture, because the women are mourning at the tomb, at the time of the funeral or at anniversary celebrations. Women were allowed (and were expected) to take part in funerals of members of their family, and by a restriction of Solon, women over sixty years of age could attend the funeral of distant relatives.

Turning now from sculptured representations of veiled ladies to



FIGURE 12. ARCHAIC PAINTED TABLET, BERLIN.  
After *Antike Denkmäler*, I. Pl. 7

paintings, the series of archaic painted tablets found near Corinth, now in Berlin, show several instances of the gesture expressive of uncovering the face as unequivocal as the Chrysapha stele.<sup>2</sup> Figure 12 is one of these tablets showing Poseidon and his consort Amphitrite. The contemporary François vase<sup>3</sup> not only shows Thetis,

<sup>1</sup> Cf. O. Hamdy Bey and T. Reinach, *Une Nécropole à Sidon*, 1892, pp. 259-260, and pls. VI-IX, "Voici maintenant une pose moins mélancolique, mais non moins noble et pudique: d'un bras ployé horizontalement la femme ramène un pan de sa draperie; de l'autre, relevé verticalement, elle retient un bord du voile; geste majestueux vraiment matronal, que les monuments prêtent souvent à Héra. Il n'est pas représenté moins de cinq fois sur nos reliefs (Nord, 1re et 4e figures; Sud, 2e; Est, 2e; Ouest, 2e), toujours avec de légères et ingénieuses variantes: et aussitôt reviennent à notre mémoire l'Archippé de la stèle de Proclès et Procléides, les figures charmantes de Démétria et de Pamphile."

<sup>2</sup> See p. 381 above.

<sup>3</sup> Cf. Furtwaengler und Reichhold, *Gr. Vasenm.*, pls. 1, 2.



the bride, visible through the open door of the megaron, in the act of unveiling her face, but in the marriage procession of gods and goddesses also, Doris, accompanying Nereus, holding away from her face her mantle as she turns back to look at Athena. Maia, Thalia, Demeter, and the Hora farthest from the spectator all have the same pose of holding the himation from their bodies, but it is over their shoulders only and not over their heads. Equally archaic figures of women drawing their himatia from before their faces are to be found on the "Polledrara Hydria"<sup>1</sup> in the British



FIGURE 13. KYLIX, MUNICH.  
After Furtwaengler—Reichhold, *Griechische Vasenmalerei*, Pl. 55

Museum, and on a "bowl-shaped vase in the form of a tripod"<sup>2</sup> in the Stoddard Collection in Yale University.

In searching among Greek vases of the fifth and fourth centuries for evidence in support of the theory advanced in this paper, it has been a surprise to me that there are relatively few examples of veiling of the face to be found among published vases. The explanation may lie in these two facts: (1) The majority of scenes where women occur illustrate mythological and heroic stories from the time when women appeared in public with their faces uncovered. Figure 13, showing the interior of a fifth-century red-figured cylix, is shown because of the anachronism in costume. The painter had dressed Ge, who came to the aid of her son Tityos attacked by

<sup>1</sup> Published by Cecil Smith in *J.H.S.* XIV, 1894, pp. 206 ff., pls. VI, VII.

<sup>2</sup> P. Baur, *The Stoddard Collection of Greek and Italian Vases*, 1922, pp. 81 ff., no. 122, pl. IV.



Apollo, in garments of his own day, and I believe he has also given her a contemporary timidity with the shrinking gesture of drawing her kredemnon over her face as she starts to run away. (2) Where the vase painter shows contemporary life, the scene is usually indoors. The very absence of outdoor scenes is in its way testimony to the general theme of the secluded life of women. Most of Heydemann's illustrations from vases were late dancing figures with diaphanous garments. From among the Attic funeral vases with white background may be cited this fifth-century vase (Figure 14), with the scene showing Hermes leading a veiled lady to Charon's waiting boat.<sup>1</sup> From this it may be seen that when an outdoor scene



FIGURE 14. SCENE FROM LEKYTHOS.  
After Riezler, *Weissgrundige Attische Lekythen*, Pl. 44a

was represented the painter was as unwilling as the sculptor to cover the woman's face, and so have little but a muffled figure to show.

Attic art of the fifth and fourth centuries influenced the art of the whole Mediterranean region, and, without much question,

<sup>1</sup> Other fifth- and fourth-century vases showing veiled ladies are as follows: Red-figured krater from Athens showing a "visitor" in a gynaikonitis standing with her mantle draped over her head (Th. Schreiber, *Atlas of Classical Antiquities* (Eng. Edit.), pl. LXXXII, 13, 14); Polychrome vase from Aderno, another scene in a gynaikonitis with a seated "visitor" so swathed in her mantle that only her left hand and her eyes are visible (*ibid.*, pl. LXXXIII, 14); Lekane from Kerteh, gynaikonitis interior showing ladies at various stages of dressing and one completely dressed for the street with her mantle covering her up to the eyes (Rayet et Collignon, *Histoire de la Céramique Grecque*, fig. 109); Panathenaic amphora from the Hoppin Collection, with *Olympias*, "a personification of the Olympian Games," entirely draped in a mantle leaving only the upper part of the face exposed, the lower part being outlined below it (*A.J.A.* X, 1906, pp. 388 ff.).

The gesture of drawing the himation over the head and face occurs several times on the hydria painted by Meidias, and now in the British Museum, where the daughters of Leucippus are being carried off by Castor and Pollux (Furtwaengler und Reichhold, *Gr. Vasenm.*, pl. 8).

Attic customs and Attic styles for women spread widely with Attic commerce of the period. Some conspicuous examples of veiling from various parts of the ancient world follow. A painted grave stone<sup>1</sup> from one of the roads out of Kertch in South Russia has much of the grace of Attic art of the fourth century, and may be cited as showing that Greek ladies who followed their husbands to this Black Sea port held to Attic fashions. The inscription gives her name as Apphe, wife of Athenaeus. The stele of Menophila,<sup>2</sup> found in Ephesus and now in the Louvre, is certainly reminiscent of some of the ladies of the Ceramicus. The veiled wife in the funeral banquet<sup>3</sup> scene on one end of the Sarcophagus of the Satrap in the Ottoman Museum in Constantinople furnishes an instance of veiling from Syria. Two sepulchral statues of less than the whole body which repeat the gesture of unveiling are an unfinished bust<sup>4</sup> found on the island of Rheneia and now in the National Museum at Athens, and a crudely executed figure<sup>5</sup> found on Thera of a matron whose name was Lysikleia. Her epitaph, in saying that she was "revered by the people for her virtue and her wisdom" testifies that she followed the conventions of her day in all respects. In a necropolis at Marion on the island of Cyprus was found a large terra cotta statuette<sup>6</sup> of a veiled woman seated, now in the Louvre, and in the Greco-Roman Museum in Alexandria is another seated veiled woman,<sup>7</sup> in limestone, shown in the act of drawing her himation over her face with her left hand.

A piquant terra cotta of Europa,<sup>8</sup> found in Babylon and now in the British Museum, is a Hellenistic example of the mantle held away from the face.<sup>9</sup> The design of the encircling mantle as a frame for the face and shoulders appealed strongly to Roman taste and was used frequently in the first century of the Empire. An outstanding example is on a relief<sup>10</sup> from the west wall of the Ara Pacis where Tellus, or possibly Italia, is seated between two divinities outlined against encircling draperies. Roman coin types repeat the design frequently.

Palmyran sculptures furnish many examples of the gesture of drawing the veil from before the face, as may be seen in H. Ingholt, *Studier over Palmyrensk Skulptur*, 1928, Plates VIII, X to XVI inclusive.

<sup>1</sup> Minns, *op. cit.*, fig. 219.

<sup>2</sup> Collignon, *op. cit.*, fig. 181.

<sup>3</sup> Handy Bey et Reinach, *op. cit.*, pl. XXI, 2.

<sup>4</sup> Collignon, *op. cit.*, fig. 193.

<sup>5</sup> *Ibid.*, fig. 190.

<sup>6</sup> Collignon, *op. cit.*, fig. 113.

<sup>7</sup> *Ibid.*, fig. 114.

<sup>8</sup> A. W. Lawrence, *Later Greek Sculpture*, 1927, pl. 105 (b).

<sup>9</sup> As Professor Elderkin has reminded me, this design of mantle is found first on one of the Gjölbaschi reliefs.

<sup>10</sup> Mrs. Strong, *Roman Sculpture*, pl. VIII; compare *J. Rom. St.* III, 1913, Pt. I, pp. 134-141, A. W. Van Buren, *The Ara Pacis Augustae*.

From much farther east comes the relief shown in Figure 15<sup>1</sup> where two Persian ladies are seen riding. Each one raises the hand not holding the reins in a way which has meaning only if one thinks that originally color showed a veil painted against the background, which the raised hand was holding.

When Roman sculptors adopted fourth- and third-century Greek types, they achieved some of their most beautiful sepulchral monuments. Three well-known full-sized figures of mantle-veiled ladies are the "Mourning Lady"<sup>2</sup> from Trentham Hall in the British



FIGURE 15. PERSIAN RELIEF.

After M. Rostovtzeff, *History of the Ancient World*, I, Pl. XXXVIII, 2

Museum, "La Pudicité"<sup>3</sup> in the Louvre, and the portrait statue of Viciria<sup>4</sup> in the Naples Museum. Figure 16<sup>5</sup> is a beautiful example of veiling in Roman portraiture which has recently come to the Metropolitan Museum of Art.<sup>6</sup>

<sup>1</sup> Rostovtzeff, *op. cit.*, attributes this relief to the fifth century B.C. Professor Clark Hopkins of Yale University kindly called my attention to this relief, and gave me this additional information: "The paintings from Doura-Europos show Bithnemaia in the great scene of sacrifice with the veil thrown over the head. She is not holding it up, for the scene is evidently indoors, but the veil is of the usual type, although here the costume is certainly eastern, as shown by the costume of the priests. It may be Semitic ritual portrayed as Cumont (*Fouilles de Doura*) suggests. I am inclined to think, however, it is Parthian. How much the Parthians borrowed Persian costumes we do not know, but probably very largely."

<sup>2</sup> A. W. Lawrence, *Classical Sculpture*, pl. 118.

<sup>3</sup> Collignon, *op. cit.*, fig. 183.

<sup>4</sup> Lawrence, *op. cit.*, pl. 127.

<sup>5</sup> *Bull. Met. Mus.* XXVI, 3, p. 62, C. Alexander, *A Roman Portrait*.

<sup>6</sup> With this bust should be compared the full standing figure of the same type in the National Museum in Rome (See E. Strong, *Art in Ancient Rome*, vol. II, frontispiece).

The *locus classicus* in literature for a change in the style of Greek dress is Herodotus V, 8, where Herodotus says that in about 530 B.C. the Athenians punished the women of Athens for their murderous use of their brooches by requiring them to wear Ionian dress of linen, which needed no pins. And Herodotus says that, speaking strictly, the new style was not Ionian but Carian. Archaeological



FIGURE 16. A ROMAN PORTRAIT, NEW YORK.  
Courtesy of the Metropolitan Museum of Art

evidence, as well as historical, bears out the fact that many "Ionian" or eastern fashions came to Athens in the middle of the sixth century.<sup>1</sup> But a change of fashion for women ordinarily is no "punishment." May not the "punishment" have been that coincident with the adoption of eastern styles by men and women there came also to Greece the idea that women must not be seen in public? Their restriction to their own homes would tend to make them shrinking when they did come out of their seclusion at the time of

<sup>1</sup> The writer of this article knows no instances of veiling in Minoan or Mycenaean art.

festivals and funerals, so that involuntarily they covered their faces. Or the eastern idea of a woman's being a chattel of her father or husband may have been one of the ideas that came west along with "Carian" or "Ionian" dress.

When I started this investigation I hoped that I could find a chain of evidence which would link the Greek custom of veiling the face with an earlier Assyrian regulation enjoined in the Assyrian Code of about 1500 B.C. discovered by the German Orient Society between the years 1903 and 1914 in their excavation of the site of Assur, the oldest capital of Assyria, but there are still gaps both geographical and temporal to be filled. Jastrow<sup>1</sup> made a full translation of the Code into English, and also published under the title *Veiling in Ancient Assyria* a paragraph<sup>2</sup> which he selected, "as an illustration of the extraordinary interest of the Code, from the sociological point of view; the provisions that it contains for the street dress of women and which incidentally furnish an explanation of the origin of the custom of veiling for women, still so widely spread among the Near East and which, through the Code, can now be traced back to the second millennium B.C." The Code shows indisputably that the original intention of the veiling of the face was to indicate that the woman was the possession, or chattel, of her father or husband. We should like to think that a less narrow interpretation was developed with the passing of time and the extension of the custom to other countries, but, if my interpretation of Plutarch, *Moralia*, 232C,<sup>3</sup> is correct, the old idea of hiding a possession from the gaze of other men made the veiling of the face something more than a symbol through the whole of the Greek period.

CAROLINE M. GALT

MOUNT HOLYOKE COLLEGE

<sup>1</sup> M. Jastrow, *Veiling in Ancient Assyria*, in *Rev. Arch.*, Série 5, vol. XIV, pp. 209 ff.

<sup>2</sup> *Ibid.* A part of Jastrow's translation of paragraph 39 of Text No. 1 (corresponding to col. 5, lines 42-105) follows: "Wives or (daughters as well as (concubines (?) )) when (they go out) on the street, are to have their heads (covered). The daughters . . . whether in (street) costume . . . or in garments of (the house?) . . . are to be veiled (and) their heads (uncovered) whether (daughters of a man) . . . or . . .

(two lines entirely missing)

(is not?) to be veiled. If she goes out . . . into the street during the day, she is to veil herself. The captive woman who without the mistress (of the house) goes out in the street is to be veiled. The hierodule who is married to a man is to be veiled in the street. The one who is not married to a man is to have her head uncovered in the street and is not to veil herself. The harlot is not to veil herself; her head is to be uncovered."

<sup>3</sup> *Vide* page 374 above.

American School  
of Classical Studies  
at Athens

THE GREEK STOA NORTH OF THE TEMPLE AT CORINTH

PLATE VI

THE expectation of finding new archaeological evidence, expressed in the final sentence of the preliminary report on the Roman market north of the Temple at Corinth,<sup>1</sup> has been fully realized by the excavations undertaken in 1930 by the American School of Classical Studies in the area west of the market.<sup>2</sup>

A beginning of the more ambitious program envisaging the thorough excavation of the area between the North Market, the Temple, Glauke, and the Odeum, was made in December, 1929, when a fortunate continuance of autumn weather into winter months afforded an unexpected opportunity for further digging. Professor Rhys Carpenter, Director of the School, uncovered an area of some 400 square metres west of the new market, and afterwards entrusted the author of this report with the privilege of completing the work by excavating the whole area bounded by the modern village-road on the north and by the higher bank of earth of the temple hill on the south. Its western limit lies some 55 m. distant from the eastern entrance of the Odeum,<sup>3</sup> and its greatest length and width respectively are about 60 and 40 m. Some 4,850 tons of earth had to be removed from this section.

At the beginning of the work the accumulation of earth on the north of the temple hill exceeded 1 m. This corresponded to a level some 3 m. above the now uncovered Greek road, which in turn lies 8 m. below the stylobate of the temple of Apollo taken as the zero level on all maps and plans of the Corinth excavations. This accumulation increased gradually to the south and consisted of two fairly distinct layers, the upper of black earth with different strata of ashes and burned material and fills of pebbles and stones, the lower containing mainly reddish-brown earth whose color is due to the great quantity of brittle surface rock and yellow clay mixed into this

<sup>1</sup> F. J. deWaele, "The Roman Market North of the Temple at Corinth," *A.J.A.* XXXIV, 1930, pp. 432-454.

<sup>2</sup> The author of this report is extremely indebted to the scientific help and suggestions of the Director of the School and of the veteran excavator, Mr. B. H. Hill, and further gratefully acknowledges his obligations to Professor Katherine Edwards for her study of the bronze coins, to Miss Lucy Talcott for her assistance in cataloguing the small finds, and to Professor Richard Stillwell and Mr. L. C. Douglas, who made the plan of the area. He has once more had the opportunity of appreciating the technical experience of the foremen Sophocles Lekkas and Nicholas Laloudis.

<sup>3</sup> Cf. O. Broneer, "Excavations in the Odeum at Corinth, 1928," *A.J.A.* XXXII, 1928, pp. 447-473, pl. V.

stratum. The higher layer (about 2 m. deep) represents roughly the accumulation of the centuries that have elapsed since early Byzantine times, while the lower one contains the deposit of the prehistoric, Greek, and Roman periods.<sup>1</sup>

The traces of settlement in the Turco-Greek period, from the fifteenth century on, consisted of insignificant remains of water-conduits, foundations of houses, coarse pottery, Turkish, Venetian and modern coins. From late mediaeval times on, this area was almost as completely deserted as it was when the American excavations started thirty-five years ago.

Of more importance were the architectural remains of Byzantine times (sixth to fifteenth century). In the east part of the area, at a depth of some 1.80 m., Byzantine coins<sup>2</sup> of the middle period turned up in great quantity, some 200 coming from an area of about 10 square metres. In a Byzantine house of the southeast section (B<sup>1</sup> on Fig. 1) some pottery was found in a small circular reservoir cut in the rock, and could be dated very roughly by the presence of a coin of Nicephorus III (1078-1091). In the northwest section

<sup>1</sup> The letters on figs. 1 to 6 indicate:

- a: unexcavated earth showing stratifications;
- A: Roman road and well;
- B: remains of Byzantine houses (1-3) and Byzantine well (4);
- C: traces of the "first stoa" (piers, 1-5; foundation cuttings, 6; channel, 7);
- D: "second stoa" (cuttings, 1-2; channel, 3);
- E: Greek main road (1) and Greek side road (2);
- F: remains of a Greek building (house?);
- G: remains of Greek walls;
- H: remains of a Greek building (house?);
- J: Roman wall, probably north limit of temple temenos;
- K: "third Greek stoa";
- KK: recess at which the remains of the stoa begin;
- L: remains of a prehistoric street or floor;
- M: central plaza of Roman market with a surrounding portico;
- N: waterbasin, channel and manhole in Greek street and stoa (1-3);
- P: piers 11 (gold find), 14, 17, 19 still partially in place;
- Q: former quarrying;
- R: finding-place of the Pholoë krater;
- S: shops at the south side of the Roman market;
- T: foundation for the stone barrier X, north of the Greek street;
- V: east end of the stoa;
- W: shops at the west side of the Roman market;
- X: stone barrier north of the Greek street;
- Y: cross wall over the 6th pier;
- Z: probable west end of the stoa;
- AA: archaic street;
- BB: brick building;
- CC: "analemma";
- DD: Byzantine staircase;
- EE: north rock cutting of archaic street.

<sup>2</sup> Excluding the two hoards (the one of 51 gold staters and the other of 400 bronze coins) the Byzantine form about a third of the total of 700 coins found in this excavation. This percentage, however, is less than that found in the other excavated areas at Corinth, owing to the unusually high ratio of Greek coins (33 per cent) found in the complex of the stoas. Cf. note 2, p. 411.



(B<sup>2</sup>) were found considerable remains now completely removed. The floor in herring-bone pattern (similar to the pavement of the shops of the market)<sup>1</sup> the depth of the foundation walls and their fabric with fairly hard cement, rather suggest an Early Byzantine date; but no further particulars of this building could be ascertained. It stood largely on important remains of Greek architecture scattered in the area of the Greek stoa and the Greek road. Another Byzantine house in the extreme northwest section (B<sup>3</sup>), although not assignable to a definite period, must be dated somewhat later than the preceding one. It has some interesting features: on top of the surviving walls a modern water conduit was laid in later times; and

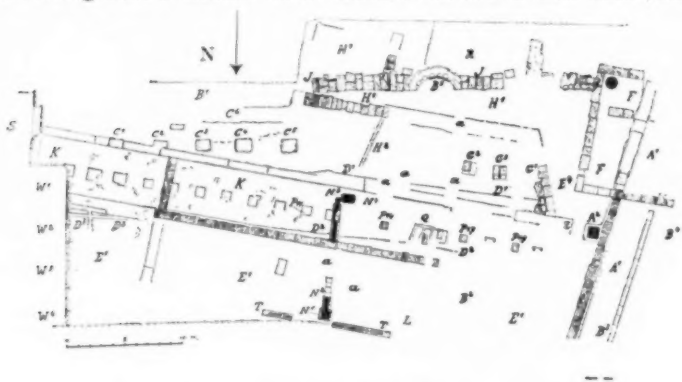


FIGURE 1. PLAN OF THE GREEK STOA, NORTH OF THE TEMPLE

below these the tile gutter which constituted the west border of a Roman street (A<sup>1</sup>) running roughly north and south was carefully preserved by the builders of the house. At the extreme western limit of the excavated area, a well (B<sup>4</sup>) has been cleared to a depth of 13 m. below its high curbing. Its oval shape and the few sherds among the content of mud and rough stones assign it to one of the Byzantine periods.

The limekiln too (B<sup>5</sup>), for the construction of which a part of the Roman retaining wall J was removed, dates from Byzantine times. Perhaps it is contemporary with the limekiln in the thirteenth southern shop of the Roman market. There was a fill of ashes and burned material, even some partly burned marble, in this kiln; and two Venetian colonial coins proved that the construction remained open until fairly recent times.

The Roman period was represented by very thin layers, dating

<sup>1</sup> deWaele, *loc. cit.*, p. 442.



especially from the first to the fourth centuries after Christ. These strata, varying between 0.60 m. and 0.90 m. above the level of the Greek street, yielded fragments of genuine and local Arretine ware, late Roman and Christian lamps, and the traditional small copper coins, of which a fourth-century hoard of 400 small pieces was found.<sup>1</sup> The most important feature, however, is the Roman street (A<sup>1</sup>) running roughly north and south at a slightly obtuse angle with the Greek stoa. A stretch of some 20 m. of it has been uncovered. It is bordered by a gutter of slightly hollowed tiles on the west side, and by a channel, made of tiles, and by the foundation for a wall and its rock cuttings on the east side. The presence of many fourth-century coins on this street attest its open use up to the end of that century, when Alaric destroyed the town. At the east side of the Roman road, in the direction of the south wall of the Greek stoa, a square Roman well (A<sup>2</sup>) was investigated to a depth of 11 m. below the rock of the hill. Except for a few Greek coins and some Corinthian sherds, the fill was entirely of Roman character and extremely varied, including red and yellow stucco fragments, glass, lozenge-shaped bricks, sherds of genuine and local Arretine pottery,<sup>2</sup> a plastic sima with a lion's head<sup>3</sup> and plastic antefixes with the Gorgon's head,<sup>4</sup> a circular poros base, many pieces of big two-handled Roman jars, and a quantity of lamps.<sup>5</sup> From the last, especially, we conclude that the fill accumulated toward the end of the first or at the beginning of the second century, or even later, and that probably the road was made in the early times of the Roman colonisation.

The importance of the excavation does not depend on these periods, but on the fact that it uncovered a Greek stratum with considerable traces of Greek buildings and scattered finds of good Greek workmanship. These will have to be examined in chronological order.

The oldest traces of building activity in the region are mainly of topographical interest. They were discovered behind the Roman brick-building and the first south shops of the Roman market.

<sup>1</sup> The hoard contains coins of Constantius I (coined after his death), of Constantius II, of Valens, Valentinianus II, Theodosius I, Honorius, Arcadius and Theodosius II. Moreover, there are some very interesting "barbarous" imitations.

<sup>2</sup> Among the fragments was one Arretine signature CORNELI and a sherd of local imitation of Arretine ware with the graffito PGPPOO. There were also vases of Corinthian clay with manifest barbotine technique of Roman pottery, fragments of a terracotta arula (lamp?) and of two terracotta statuettes.

<sup>3</sup> Inv. S. 383.

<sup>4</sup> Inv. A 168 ff., cf. Ida Thallon-Hill, *Decorated Architectural Terracottas* (Corinth IV, 1), 1929, p. 17, fig. 12, 2-4.

<sup>5</sup> Except for a few pieces of late Hellenistic times (O. Broneer, *Terracotta Lamps, Corinth*, 1930, Type 16 (3) and 20 (1), most of the lamps are of the first and second centuries A.D. Broneer, Type 24 (8 pieces) and 27 (2 pieces).

East of the end of the latest stoa ("Third Stoa"), Figure 6, AA, the rock was deeply cut, and traces of wheelruts are visible. Moreover, two poros blocks of extremely careful workmanship suggest the *analemma* for a street (CC). By discovering wheelruts immediately beside the northern stylobate of the temple, between the tenth and the eleventh columns from the west, Professor O. Broneer was able to trace this same carriage road or archaic street across the temple hill. Since it passes under the stylobate of the temple, the road is earlier than the temple and consequently dates back into the seventh century B.C. Probably it was not put into disuse after the building of the temple, but suffered a change in direction toward the west. But the elucidation of this topographical problem involves the long-promised excavation of the entire temple area to bed rock.

The remains of the oldest Greek building in this area belong to an earlier stoa ("First Stoa") and consist of five almost rectangular cuttings in the rock in the southeast section (C<sup>1</sup>-C<sup>5</sup>) with the same orientation as the temple of Apollo. The rock cutting 1.50 m. south of these (C<sup>6</sup>) evidently was intended to support the south wall of the building. Owing to the building activity of later times, all traces of this earliest stoa, on its east, north and west sides have completely disappeared. The rock cutting (H<sup>2</sup>) 3 m. northwest of the most western piers (C<sup>5</sup>) is more probably connected with building H. Evidently the rectangular rock cuttings were intended for the erection of piers, just as in the later stoa; but it is hard to say whether these scanty remains belong to a mere basement room or to the type of building with pillars which we usually call a stoa.

The second building, succeeding to the earliest stoa or perhaps superseding it, can be recognized only by the rock cutting for the north and the south wall (D<sup>1</sup> D<sup>2</sup>). The character of this building cannot be fixed exactly. To the west it extends almost to the end of the later stoa, where its western end, some 6 m. wide, can still be traced. But the eastern end of neither this building nor the earliest stoa can be determined, because the deep cutting and removal of the hillside rock for the Roman market have destroyed all traces of the beddings for piers and walls. Close examination of the rock cuttings suggests the hypothesis that this building had no piers and that the layer of trodden earth which served as a floor remained practically intact—at least in its western part—for the later stoa. From the fact that this second building comes chronologically between an older and a later stoa, it is highly probable that it, too, was a stoa. With this "second stoa" is probably connected a little water channel preserved in the rock just west of the Roman market (D<sup>3</sup>).

With the building of this second stoa belongs the construction of the Greek road (E<sup>1</sup>) which runs along its north side. Here, in the western half of the north side of the excavated area, there was encountered a hard-trodden white layer some 0.03 to 0.05 m. thick (Fig. 4, E) which even turned the west side of the stoa (Fig. 1, E<sup>2</sup>). A thorough examination of the fill below this white, undisturbed bedding of the Greek road was the main source of information for the date of the previously mentioned rock cuttings. This fill contained many prehistoric sherds, mostly Early Helladic I, Corinthian ware of the second half of the sixth century, imitation Attic black glaze, fragments of skyphoi with heavy foot, and ware with fugitive Corinthian glaze; but at the same time there was a total absence of the lustrous black metallic glaze with incised ornamentation which must be dated mainly in the fourth century.<sup>1</sup> This evidence makes it almost certain that the street with its hard layer of white poros and limestone chips and pebbles was laid out before the fourth century, in the second half of the fifth century, presumably before the Peloponnesian War. When the north wall of the later "third" stoa was built this white layer of the street was cut through. Consequently the street antedates the third stoa and must be connected with the second stoa, which must accordingly date from the last half of the fifth century, while the earlier stoa was perhaps built in the first half of that century, or, on account of its orientation, still earlier.

The water basin (N<sup>1</sup>) has a drain which runs in a southerly direction to a manhole (N<sup>3</sup>) at almost an exact right angle to the axis of the second stoa. It should, therefore, belong to the same period of building activity. The purpose of this basin (N<sup>1</sup>) seems to have been to collect the water drained from the roof of some building north of the street, and to empty the overflow into a water channel (N<sup>2</sup>) covered by re-used marble slabs.<sup>2</sup> Where this drain has been cleaned by excavation, it contains sherds and figurines indicative of the same period as the fill under the white bedding for the street, which covered the water channel. The water basin itself was open and held water to a depth of 0.14 m., at which height the overflow for the channel was constructed. Such water basins, filled with rain

<sup>1</sup> Although it is generally accepted that the ware with the uniform black metallic glaze comes into vogue in the fourth century B.C. (F. Courby, *Les vases grecs à reliefs*, Paris, 1922, pp. 170 ff.), this date seems liable to correction as there is fairly conclusive evidence that it occurs in Corinth already in the fifth century.

<sup>2</sup> The top of the water basin is about 0.10 m. above the hard white layer and on the same level as the brown stratum which covers the street bed. Under the street, five slabs of marble (the largest 0.50 m. x 0.35 m. x 0.07 m.) covered the channel; but to the south of the street and in the stoa, this covering was effected with poros slabs 0.28 m. thick. In two of the marble slabs there are remains of lead clamps, pointing to a former, unknown use.

water from the roofs,<sup>1</sup> may have been drinking places for passing horses and mules. Through an opening cut in the rock, the water from the overflow channel was emptied into a well (N<sup>3</sup>) rectangular in shape but with rounded corners.<sup>2</sup> Thence a long tunnel (N<sup>4</sup>) led westward for 23 m. and ended against the solid rock in a kind of reservoir or cistern.

In the southwest corner of the excavated area lies a Greek building, probably a Greek house. This could not be completely uncovered in the 1930 campaign; but as far as can be ascertained, it belongs to the period of the second stoa. It is 11 m. long and consists of the remains of at least two rooms. The most southerly of these contains a circular well of Greek workmanship 0.90 in diameter, the fill of which consisted of two heavy poros blocks (apparently from the house walls) and of Early Helladic and Corinthian sherds. The use and purpose of this building are unknown; but it seems probable that it was constructed even earlier than the second stoa and that it was destroyed with it, before the fourth century, to make a place for the third stoa.

There is further a wall of Greek workmanship (G<sup>1</sup>, Fig. 5), which makes a sharp angle both with the rock cutting for the south wall of the second stoa and the east wall of the Greek building F. This wall, of fairly heavy blocks, cuts across the south wall of the second stoa, but its northernmost blocks are cut away for the south wall of the third stoa and the Greek house but existed before the third stoa was built. About this oblique wall G<sup>1</sup> very little can be said except that cuttings in the rock show that it was connected with the north wall of another building H<sup>1</sup>.

This latter building, coming between the destruction of the second and the building of the third stoa, cannot be interpreted exactly. The oblique wall G<sup>1</sup> possibly was a retaining wall lining a narrow sideroad (E<sup>2</sup>) which branches off from the main Greek road (E<sup>1</sup>) north of the second and third stoas. In the building, especially in the centre of it, there was a very heavy layer (about 0.70 m. thick) of yellow and greenish Corinthian clay, filled with a quantity of Corinthian sherds, fragments of many vases, among which the most conspicuous ones are some aryballi and alabastra, a beautiful fragment of a Corinthian skyphos with cover, a so-called pyxis, and one of the most outstanding pieces of the campaign, the Pholoë krater. The house itself had probably at least two rooms; but the Roman

<sup>1</sup> The manhole on the temple hill, connecting with the long tunnel in the seventh southern shop of the market, collected in a similar way the rain water from the roof of the Apollo Temple. Similar devices have been found near other ancient temples (e.g. the Poseidon Temple at Sunium).

<sup>2</sup> The well measures 1.10 m. by 0.70 m. at the opening, and is 4.40 m. deep.

retaining wall J and the later limekiln B<sup>5</sup> have destroyed most of the evidence. Its actual extent, however, may be ascertained in a future campaign by digging further to the south. In its southeast part a circular reservoir, only 0.20 m. deep, deserves mention, and on its north side the little channel (H<sup>2</sup>) which carried off the water, probably to the manhole (N<sup>2</sup>) in the second stoa. When the later stoa was built, however, the outlet of this channel was completely filled up.

By far the most important building is the third stoa (K). It has



FIGURE 2. GREEK STOA AND ROMAN MARKET FROM THE SOUTHEAST

now been uncovered at its two extremities, the east end being formed by the recess (Fig. 2, KK) 21 metres in length, situated behind the first shops of the Roman market, while the west end (Fig. 2, K) is entirely preserved for a length of about 45 m. When space for the Roman market was hewn out of the area of the Greek stoa, the central portion of this stoa for a distance of some 25 metres disappeared completely, along with the front part of the eastern end. Likewise all traces of the earlier stoas were lost here; but, though they extended toward the east, they probably never attained the length of the third stoa. Since the western end cannot be fixed with complete certainty, the presumable length of the last stoa ranges between 91.70 and 93.30 m., or slightly over 300 ancient feet. Its orientation is from E.N.E. to W.S.W.

A part of the east end of the stoa had already been excavated in 1929.<sup>1</sup> This excavation was now completed and the inner southeast corner of the stoa (Figs. 3 and 6, V) discovered. The preserved section of the back wall (21 m.) runs behind the second to seventh shops of the Roman market. This rear wall at the east does not continue the exact line of the rear wall as it reappears in the western area on the rock shelf but jogged forward 0.65 m. behind the partition wall between the seventh and eighth shops (visible Fig. 2, KK). Only from this point on it pursued the true line of the remainder of the stoa,



FIGURE 3. GREEK STOA AND ROMAN MARKET FROM THE NORTHWEST

with the result, however, that it is only after the Roman market has been passed that the rear wall of the stoa reappears. Behind the shops, the third stoa shows two different levels, the section stretching from the second to the fifth shop being about 0.60 m. lower than that behind the two following shops (Fig. 6, K). In the first period, the east section of the stoa had its rock wall covered with a coating of hard cement—not an infrequent occurrence in Greek buildings in

<sup>1</sup> deWaele, *loc. cit.*, fig. 5, ZZ, pp. 448–450. Near the southeast corner there are considerable remains of the Byzantine staircase leading up to the temple (p. 440, fig. 4); cf. fig. 8–6, DD. The preserved width at the east end is only 4.35 m.; consequently some 2 m. were cut off at this point. The original height of the rock, which served as rear wall of the stoa in the extreme east section, has likewise disappeared because of later Byzantine buildings; but a small part of the north rock cutting for the “archaic” street is still visible back of the 2d and 3d shops, fig. 6, EE.



Corinth,<sup>1</sup> but in a later period the level of the floor was raised to the height of the rest of the stoa. A second coating with painted stucco now covered the first one of cement to a height of about 1 m. above the original rock-floor. This floor was not left in the natural state of the rock, but was covered by a thin flooring (0.03 m. to 0.04 m.) of mortar and pebbles, still visible in some spots. No traces of piers or pillars were discovered; and, moreover, the painted stucco rather suggests living rooms than a basement supported by a central range of piers.

A study of Greek town-planning and market-building will show that we are justified in calling this oblong building with its central row of piers a "stoa." In a Greek city the agora, where all kinds of transactions of public and private business took place, was surrounded mostly by shops and colonnades. Former excavations at Corinth in the region of the agora have uncovered totally or partially the so-called "North-West" and the "South Stoa." Similarly the temple hill, which was the heart and real central point of the city, as recent excavations have shown, was surrounded on at least three sides by oblong buildings with colonnades devoted to business and public life. These buildings are the "Northwest Stoa" on the south, the "Greek North Building" on the east side,<sup>2</sup> and our new North Stoa excavated in 1930. Evidently the intent of this architectural arrangement was the creation of a monumental frame around the temple hill and precinct.

The average width of the North Stoa is 6 m.; its interior width 4.5 m. In the western section on the rock shelf there is a long row of nineteen square or rectangular cuttings (P) intended as foundations for as many square or rectangular piers, three of which, i.e. in the fourteenth, the seventeenth and the nineteenth cuttings, have been preserved. From their dimensions<sup>3</sup> and exterior shape, it is obvious that they never were meant to be seen. They are spaced, however, at a very regular interval of 2.15 m. from each other; and it is, therefore, certain that these scanty remains belong to a sub-structure or cellar-like building, supporting the real stoa. This opinion is supported by many other observations. Among the few blocks of architecture, found in the excavated area, there are three blocks with a moulding, evidently once belonging to the eaves of

<sup>1</sup> Especially in the fountain Peirene and Glauke, and in the tunnel under the temple hill.

<sup>2</sup> Covered Greek market, so-called North Building: R. Carpenter, *Guide to the Excavations and the Museum*, p. 16; Northwest Stoa, excavated in 1902, 1907, 1908, 1925; B. H. Hill, "Excavations at Corinth in 1925," *A.J.A.* XXX, 1926, pp. 46 ff.

<sup>3</sup> 14th, 17th and 19th piers respectively 0.72 m. x 0.60 m. x 0.60 m.; 1.05 m. x 0.60 m. x 0.60 m.; 1.55 m. x 0.65 m. x 0.55 m.

the roof. These have the important feature of not being cut to receive sima or roof-tiles but of having, on top, oblong cuttings for some sort of stone balustrade. There is, therefore, conclusive evidence for an upper story to the stoa. It is a common Hellenistic device thus to employ two stories; examples of such stoas exist in Aigai, Alinda and Assos.<sup>1</sup> In the Stoa of Attalos II there were superposed colonnades.<sup>2</sup> Also the finding of the gold treasure near the eleventh pier rather points to the existence of a basement, much less accessible than an open colonnade. As to the height of this basement, the nineteenth pier (Fig. 3, P 19) with a height of about 1.25 m. above the trodden layer of the floor furnishes the minimum limit. There is not the slightest evidence of the existence of windows for this cellar; if there were any, they would have been on the north side, as the south side was probably completely hidden either by the rock or by the accumulation of earth.

The trodden layer of earth, which constituted the floor of the basement, was of different thickness, varying from 0.05 m. to 0.03 m. according to the depressions in the rock bed. It was observed, against the extant piers, that the earth floor had been cut through, in order to set the piers. This may point to a reconstruction of the stoa in which an earlier building without piers was replaced by one with a basement and an upper story. As, however, other traces of a reconstruction, e.g., layers of poros chips, were not found, the explanation must be looked for elsewhere. Most probably, the old earth floor of the second stoa was still intact, so that it could serve also for the third stoa, when the piers were erected. At the same time there was a reconstruction of the water channel, which passed under the twelfth pier, and poros slabs were laid over the drain. In the fill immediately above these slabs some fragments of black vases with incised palmettes, imitating metal work, were found: they date probably from the first half of the fourth century. For the sixteenth pier a special base slab was laid, earlier quarrying having partly destroyed the surface of the rock at this spot (Figs. 1 and 3, Q).

Only very few and uncertain traces remain of the west end of the stoa. If the west wall met the oblique wall G<sup>1</sup> in an obtuse angle, the twentieth pier would be a kind of anta. It is, however, more probable that the end lay 1.50 m. further to the west and that the west wall fitted in the rock cutting immediately west of the wall G<sup>1</sup> (Figs. 1, 3 and 5, Z).

<sup>1</sup> Anderson-Spiers-Dinsmoor, *The Architecture of Ancient Greece*, London, 1927, p. 176, figs. 76 and 77.

<sup>2</sup> *Id.*, p. 178. At Corinth, the northwest stoa of the agora can be shown to be two-storeyed.



The upper storey certainly opened toward the south on the temple temenos. It may be that it was accessible by a flight of steps, if the accumulation of earth on the temple hill did not suffice; but the foundation stones G 2 and G 3 (Fig. 1) do not belong to any such hypothetical flight of steps, as one of the fragments is a re-used marble triglyph from an unknown Roman building. As to the construction of the upper story, it may have been similar to that of the "Northwest Stoa" of the agora, although the thinness of the remaining foundations points to a much lighter construction. Along the front of the "Northwest Stoa" were Doric columns spaced in the Hellenistic manner with three metopes and triglyphs to each intercolumniation of 2.15 m. Our stoa probably showed a similar arrangement. In the interior row, above the piers of the basement, but spaced twice as far apart with the double intercolumniation of 4.30 m., Ionic columns probably supported the roof.<sup>1</sup> A Doric capital may derive from this upper story.

As to the use of the basement, it probably served as a storehouse for common objects or merchandise. We know only that, at the end of the fourth century, someone dug a little groove in the rock floor about 0.10 m. below the trodden earth at the northeast corner of the eleventh pier and in this groove concealed treasure, consisting of a superb golden necklace and fifty-one gold staters of Philip and Alexander, covering them with a common plate of Corinthian clay and very fugitive glaze. Apparently he was never able to return and recover his treasure. About the provenience of the gold, nothing, of course, can be said; but the presence of such a masterpiece of the goldsmith's art as the necklace, at least makes it probable that theft was responsible for the concealment of the treasure.

If we date the second stoa and the early Greek street in the second half of the fifth century, it is probable that, on account of the vicissitudes of the city in the last third of the fifth and the beginning of the fourth century, the *terminus post quem* of the third stoa must be about the time of the peace of Antalkidas in 387 B.C. (The "North Building," east of the temple, was dated by the excavators at the end of the fifth century.)<sup>2</sup> The *terminus ante quem* is the time of Alexander. Consequently the third stoa should have been built about the middle of the fourth century. It is about half a century older than the Greek "Northwest Stoa," excavated by Mr. B. H. Hill in 1925 and dated by him at the end of the fourth or the beginning of the third century. This "Northwest Stoa" does not run parallel to the stoa north of the temple hill.

At some time between the fourth century and the destruction of

<sup>1</sup> *Guide*, p. 16.

<sup>2</sup> B. H. Hill, *loc. cit.*; *Guide*, pp. 35 ff.

the building, a thorough reconstruction took place. Perhaps it was on this occasion that the extreme western part of the stoa (behind the shops of the Roman market) was raised and the walls coated with a layer of painted stucco. How far the basement was changed cannot be ascertained. Perhaps the stoa was shortened and the central part of it no longer used. At any rate the sixth pier disappeared and partially over its rock bed a wall Y (Figs. 2 and 3) was built, perpendicular to the line of the north and south wall of the stoa and extending so as to form a barrier across the street north of the stoa.



FIGURE 4. SOUTHWEST PART OF THE EXCAVATION FROM THE SOUTHWEST

This street presents some features which merit discussion. It was argued already that the hard-trodden layer of white chalk and poros chips (Fig. 4, E) must be contemporaneous with the second stoa. Its southern limit consequently was set by the wall of the stoa; but its northern limit is not apparent and was probably completely changed at the arrangement for the third stoa. At that time, oblong blocks of stone, resting on rough foundation stones (Figs. 4 and 5, T) were set for the border, which was uniformly at a distance of 6.20 m. from the north wall of the stoa. Of the northern street blocks, two large fragments 2.5 m. and 5 m. long and covering a stretch of 11 m., have been found *in situ*. On the top of these blocks are grooves 0.20 m. wide, as well as round and square dowel holes. They were intended for a fence or parapet of stone slabs. Similar

constructions have been discovered in previous excavations in Corinth.<sup>1</sup> A new feature, however, was the preservation of the oblong slab, 2 m. high, fitting exactly into these grooves. The slab had been broken in two, and the lower part was still in place in its groove, while the upper part was lying where it fell (Fig. 4, X). So high a barrier is unique in Corinthian architecture. The street was thus bounded on its northern side by a stone screen 2.20 m. high; and these high barrier slabs were supported by columns, fitting over the dowel holes. This leads to the conclusion that a



FIGURE 5. GREEK STREET, FROM WEST

part of the area now buried under the main road of the modern village was once occupied by a building, some element of which was concealed from the eyes of the passer-by. Presumably, there must have been a sanctuary here. If we reconstruct the visit of Pausanias with the help of the many topographical indications from former excavations, it seems possible to identify this with the sanctuary of Athena Chalinitis, inasmuch as a quantity of votive figurines were found by Professor T. L. Shear fairly close to this spot in 1925 and 1926.<sup>2</sup>

<sup>1</sup> Mr. B. H. Hill found the remains of a similar street-fence north of the Greek street running down from the absidal temple of the Agora to the Propylaea and dated by him at the end of the fifth century. Pieces of a similar fence with retaining pillars are used in a wall northeast of Temple "A," near the peribolos of Apollo.

<sup>2</sup> T. L. Shear, "Excavations in the Theater District at Corinth in 1926," *A.J.A.* XXX, 1926, p. 448; *A.J.A.* XXIX, 1925, p. 383.

This Greek street apparently was one of the important arteries of Corinth. Passing to the north of the temple hill, it had almost as much importance in Greek times as the Lechaion Road on the east side. Although the junction between the two completely disappeared, mainly as a result of the construction of the Roman market, it is easy to see that the "North Street" must have met the old Lechaion Road (probably at an obtuse angle) somewhere in the region of the Roman "Fish-market."<sup>1</sup> In the other direction, the indications are that the "North Street" swung somewhat to the



FIGURE 6. EAST END OF THE "THIRD" STOA, FROM WEST

southwest, where heavy traces of wheel ruts can be seen, in the extreme right and on the left wing of the cavea of the Odeum. It is true that the third stoa, and consequently the street with it, does not point in the direction of these wheel ruts; but we have seen that the original street was contemporary with the second stoa, which is oriented almost exactly on the ruts in the rock of the Odeum.<sup>2</sup>

Over the white bedding layer of the Greek street there extends a layer of reddish clay some 0.05 to 0.10 m. thick. Probably this, too, belonged with the street. It is very remarkable that most of the catapult balls described on page 409 were found on this later. Con-

<sup>1</sup> deWaele, *loc. cit.*, pp. 453 ff. We do not know the width of this Greek road to Lechaion, but it could scarcely have been as wide as the Roman version.

<sup>2</sup> This will be discussed by Professor O. Broneer in his publication of the Odeum, the manuscript of which I have had the opportunity of inspecting.

sequently the brown layer must be that of the time of the general destruction of Corinth. But this is not unreasonable, as there would not be any very considerable accumulation of earth on a much-frequented street.<sup>1</sup>

That the stoa was destroyed by violence is attested by the character of its remains and by a multitude of supplementary observations. About thirty large and small stone balls<sup>2</sup> were collected from all over the area, but especially from the western end. Some seventy fragments must be added to the number of complete specimens (Figs. 3 and 4). Many of them were found in the area of the stoa on the trodden hard layer or a little higher, many of them on the brown clayish layer of the street; but the largest of them (six pieces and many fragments) had been thrown in the manhole of the stoa drain. Moreover, on the floor of the stoa there were discovered burned and carbonized wood, fire-damaged roof tiles, sling bullets and spearheads; and at the north side of the street there was a pile of roof tiles and painted terracottas. Some architectural blocks came from the part of the stoa next to the Roman market; but many more were found in a heap around the fourteenth, seventeenth and nineteenth piers. Next to this last pier were discovered two magnificent terracotta simas and a Doric capital. A continuous layer of poros- and limestone chips bear witness to some rebuilding activity after the great destruction. A loose, homogeneous and almost wholly undisturbed<sup>3</sup> mass of earth, pebbles, stones, etc., covered the area of the stoa and the street to a height varying between 0.60 m. and 1 m. The pottery sherds and coins found here were all of the Greek period. It is very remarkable that most of the Corinthian and Sicyonian coins in the collection were found in the three sections around the piers which are still upright: here, too, the layers of poros chips were observed.

The manhole south of the twelfth pier contained an entirely Hellenistic fill, into which a little Corinthian ware of the sixth and fifth centuries had been swept. There was a quantity of yellow Corin-

<sup>1</sup> The accretion of earth (0.15 m. to 0.25 m.) which is visible below the fallen slab of the street fence X (fig. 4, E), above the brown layer E<sup>2</sup>, must be posterior to the time of the destruction. The slab may have been upset during the period of activity of the stonecutters, some years after the destruction.

<sup>2</sup> The largest catapult ball has a diameter of 0.33 m.; the smallest 0.09 m. The Greek letters which appear on some (IF, N or NA?, AH) may indicate a division of the army or be the mark of the stonecutter. Similar catapult balls were found in Pergamon (*Die Paläste der Hochburg*, Berlin, 1930, p. 45, pl. 25) where the doubt of Bown-Kawerau about their Hellenistic character is now seen to have been unjustified. Similar balls in the museum of Thera are weights, with the indication of their value (*Inscr. Gr. Ins.* III, 977-981), and in the old Pompeion at Athens (Karo, *Arch. Anz.* 1930, p. 98, Abb. 4).

<sup>3</sup> Except for the Roman fill which contained the head of Caracalla and some digging for later Byzantine foundations.

thian tiles and of fragments of vases, the black varnish and incisions on which pointed to an imitation of metallic ware by the potter.

A violent destruction, with evidence for siege and fire, naturally suggests Mummius' capture and destruction of the famous city in 146 B.C. The possibility of an earlier destruction in Hellenistic times must be totally rejected. There is no historical account of any similar historical event; and even had such a disaster overtaken the stoa, one would be bound to expect the almost immediate rebuilding of this architectural boundary of the temple temenos. Moreover, if the traces of destruction are not to be connected with the Roman siege, we have to account for the strange fact that, in that case, there are no traces of Mummius' destruction at all.

Yet, admitting that this disaster was that which marked the end of the city, not everything remains easy to interpret. Why, for example, were so many catapult balls found just here, in or near the stoa?<sup>1</sup> Was this part of the city the principal target of the Roman bombardment? Or was it rather here that the Corinthian lithoboloi or petroboloi<sup>2</sup> hurled the stones against the besieger?

After the destruction and the fire, probably the walls were torn down and a general pillage must have taken place. In this immense mass of architectural ruins, however, some clearing was done, old building material was readjusted to some new purpose; and the layers of chips tell us distinctly that this was done in the stoa itself, especially around the still existing fourteenth, seventeenth and nineteenth piers. This clearing up of the ruins must have happened very soon after the year of the disaster; and the fact that only some thirty to forty architectural blocks from all this immense building survived attests the thoroughness with which the work was done. The stonecutters were most probably Sicyonians. As the city of Sicyon was appointed superintendent over the Isthmian games in place of Corinth, the Sicyonians were very well acquainted with the Corinthian ruins: the destroyed city was naturally one of the stages on their journey of six hours to the Isthmian sanctuary. We know that these ruins were visited by Roman students of Greek antiquity, such as Cicero;<sup>3</sup> but so far we have had no conclusive proof that the city, destroyed and devastated by the Romans, was inhabited dur-

<sup>1</sup> Similar catapult balls of stone have been discovered in other sections of the Corinthian excavations; but they have been few in number and not datable. The numerous iron balls are of course from later times.

<sup>2</sup> We have no details about the siege of Corinth to give us the number of engines used by the besieger (Liv. XXVI, 47, 5: siege of Carthage; Joseph. *Bell. Jud.* V, 9, 2). On the question, cf. Lafaye, *Tormentum*, in Daremberg et Saglio, *Dictionnaire*, V, pp. 368 ff.

<sup>3</sup> Cicero, *Tusc. Disp.* III, 53; cf. *de lege agraria*, II, 87; *pro leg. Manilia*, 11; *ad am.* IV, 4.



ing the century of desolation.<sup>1</sup> On this account I do not venture to suggest that the blocks of the Greek stoa were immediately recut and re-used for buildings in Corinth of the period between 146 and 44 B.C.

The coins found in the fill, on and around the heaps of blocks, were mostly Corinthian, some of them Sicyonian, but none of them Roman. Possibly they were part of the *peculum* of the stonecutters; but they may also have washed down from the higher rock slope on the south or been lost by passers-by. From the Corinthian coins, however, very little can be learnt about the date of clearing of the destroyed area. Most of them are of the almost uniform type with Pegasus and trident. It is very strange that no coins were found of the Achaean league, to which Corinth belonged from 243 till 223 B.C. and again from 196-146 B.C.<sup>2</sup>

The Roman layer was extremely thin and totally unimportant. The only conspicuous examples of Roman building activity in the excavated area were the already-mentioned street and the heavy wall J (Figs. 2 and 3) extending along the south part of the excavated area of the Market and the Stoa. On the east side, this meets the back of the "Brick building" and probably ended where the rock made a turn to constitute the west side of the later Roman "Fish-market." This heavy wall of re-used blocks and careless workmanship is preserved especially at the south side of the Greek stoa, inside building H. It is partially bedded on a fairly heavy layer of clay,

<sup>1</sup> It is obvious that the people of the neighboring cities such as Sicyon, Phlius, etc., must have visited the ruins constantly, when passing by. Even toward the end of the century of desolation, Corinth may well have been occupied in a very humble way, as is suggested by some remains in the Greek market, east of the temple hill (*Guide*, p. 17). This, however, was no official occupation; and the conclusions drawn by Miss Taylor and Professor West as to the date of the Hirrus inscription (*A.J.A.* XXXII, 1928, pp. 9-22) are in contradiction with all literary and archaeological evidence. The recent (1931) find at Corinth of a silver coin of the famous triumvir Marcus Antonius from those specially minted for the 12th legion, before the battle of Actium, accords better with the probable supposition that the metrical inscription of Hirrus was set up between 44 and 31 B.C.

<sup>2</sup> Around the remaining piers of the stoa some 130 small Corinthian bronze coins (obv. Pegasus and koppa; rev. Trident, cf. *Brit. Mus. Cat. Corinth*, XIV, 1-6) and some 20 Sicyonian coins were found at different heights, mostly not far above the floor of the stoa. This type was in general use during the first half of the second century B.C. There were no coins of the Achaean League. The adherence of Corinth to the Achaean League from 243 to 223 B.C. and from 196 to 146 B.C. did not effect a revolution in Corinthian coinage, as Head expressly states (*Brit. Mus. Cat. XXXII*, cf. *Historia Numorum*, Oxf. 1911, p. 403). As silver coins are extremely rare (out of 10,000 coins found in the excavations of Corinth only 10 were silver, among which 1 stater), it cannot be proved whether or not the federal coinage affected solely the silver pieces. The conclusion drawn from the absence of Achaean League coins in the Stoa excavation is confirmed by the study of Professor Katherine Edwards, who kindly communicates to me that among the 10,000 coins found at Corinth from 1896 to 1929, only 5 are of the League (none of these is Corinthian federal; one each belongs to Pallantion, Megara and Kleonai, and one is illegible). Cf. A. Bellinger, *Cat. Coins Corinth*, 1925, New Haven, 1930, p. viii.

filled with Corinthian sherds. This construction, no doubt, was built in Roman times as a wall to mark the north limit of the temple precinct. The area of the stoa itself was left unoccupied in Roman times, until in the last half of the first century A.D. the Roman market was laid out and cut in the rock of the eastern half. At the same time, the road connecting Lechaion Road with the region of the theatre and the Odeum was shifted farther to the north than the old Greek road. Scanty remains of it were found in 1930 in the exploratory trench which uncovered part of the seventh and eighth west shops of the Roman market.<sup>1</sup> The street A 1 (Fig. 1) at the extreme west side of the excavations formed one of the side streets to this main artery of communication.

This excavational campaign on the north slope of the temple hill, which we have just detailed, not only increased considerably our knowledge of Greek Corinth, but yielded important finds in every field of ancient art. These include remains of sculpture and of painting, coins and figurines, painted tiles and jewelry; and to these we shall now turn, describing the more important in their proper chronological order.

By way of preface it should be remarked that only extremely poor inscriptions were found in the area:<sup>2</sup> the most conspicuous is a fragment of a Greek honorary decree of Roman times, apparently mentioning an emperor or a general.<sup>3</sup> Among small incidental inscriptions we mention the marks on catapult-balls, a graffito on a Hellenistic vase from the manhole in the stoa (NONNOΣ), loom-weights with the fabricant's name ΓΑΤΚ, ΑΡΧΙΣ, ΜΕΛΙΣ, the Arretine signatures CORNELI and TI(TI), the stamps GAESTAILVCR,<sup>4</sup> ΑΡΙΣΤΙΔΑ and ΦΙ on jars; and the lamp signatures ΗΡΕΙΜΟΥ and ΧΙΟΝΗΣ.

Discussing in chronological order the artistic and archaeological evidence, we must mention first the prehistoric sherds, mainly Early Helladic I, found on the rock of the temple hill and below the Greek street. Digging below the bedding of the street, we found the remains of some flooring, belonging perhaps to a very early road.

Greek votive offerings, doves, dogs, horses and riders, turned up here and there, but not in the compact masses that have occasionally

<sup>1</sup> deWaele, *loc. cit.*, pp. 446 ff.

<sup>2</sup> Inv. 990 and 991 (Greek inser.), 992 and 993 (Byzantine tomb-inscriptions).

<sup>3</sup> Inv. 994: τὸν μέγιστον . . . εὐσεβῆ ἐντυχῆ . . .

<sup>4</sup> Stamp on top part of a jar, probably a wine-jar: GAESTAI LUCR (AE and TA in ligature). It can hardly be the potter's name, e.g. Lucrio. I am rather inclined to think of a complimentary or augural stamp: gaestat (= gestat) or gaestas lucr (um). Similar stamped expressions are frequently found on wine-jars. Cf. Walters, *Hist. of Ancient Pottery*, London, 1905, II, p. 462; cf. Plautus, *Poenulus*, IV, 2, 14: *literatas fictiles epistolas*.



been found elsewhere in Corinth.<sup>1</sup> Greek vase painting and vase fabrication is better represented in small Corinthian aryballoi and lekythoi and important fragments of a red-figured krater of the South Italian type. The manhole in the stoa was filled with all kinds of débris. Sherds of very rough pottery show that coarse ware of low workmanship does not need to be Roman fabric. Other Hellenistic vases exhibit the general tendency of pottery in Hellenistic times to imitate the shape and color of metallic ware by a solid



FIGURE 7. CORINTHIAN KRATER

form, with imprint of metallic patterns (especially the guirlande and rosette) on a black shining glaze.

An important fragment of a large Corinthian pyxis with a frieze of animals was put together from a quantity of sherds found in the heavy greenish-yellow layer of clay just south of the Byzantine limekiln. From the same layer, very close to the rock were collected the fifty to sixty fragments which, under the patient skill of our technician D. Bakoulis, yielded us one of the treasures of the Corinthian museum, the tallest krater of its kind.

Figure 7 makes unnecessary a detailed description of its shape (*à colonette*) known through the numerous specimens in the Louvre,

<sup>1</sup> Theatre district and surroundings: cf. n. 2, p. 407; D. Robinson, "Terracottas from Corinth," *A.J.A.* X, 1906, pp. 159 ff., and especially A. E. Newhall, "The Corinthian Kerameikos," *A.J.A.* XXXV, 1931, pp. 1-30.

Berlin, Munich, and New York.<sup>1</sup> The complex history of Corinthian pottery is here represented in its last phase, before it passed over into the Chalcidian vase-style, by a series of some twenty kraters with mythological scenes. These cannot be dated after the first third of the sixth century, when the latest examples overlapped the beginning of the black-figured style. Together with other vases of Corinthian fabrication, these kraters with their processions and scenes of fighting, their chariot-racing and departure for the battle-field, their frieze of animals and gay banquets, give us a glimpse of the lost great art of painting and bronze working, which they recreate for us in a more graphic way than all the cataloguing description of the famous chest of Kypselos by Pausanias.<sup>2</sup> Most of the twenty kraters in question were found outside of Greece, in Italy; and this may show that they were a favorite article of export.

In these big-bellied kraters with their pronounced horizontal structure in friezes, metallic effect is aimed at in the curving of the handles and the sharp distinction between body and foot. The horizontal features, between the rim or neck and the foot, consist usually of two registers with a mythological narrative and a decorative frieze of animals, a black band with or without red-purple concentric stripes, and a bottom girdle of rays. This structural and decorative scheme is used also on our new krater from Corinth. On the upper band of the rim, the confronted lotus and palmette, joined by tendrils, are drawn in a rather careless manner. The two flat tabs and the handles on which they rest are entirely missing and restored in plaster, so that we have no reason for preferring a human, an animal, or a vegetable motive as ornament. The neck is black-varnished and without decoration. The upper register, whereon no names are inscribed, illustrates one of the exploits of Herakles, the adventure in Pholoë. According to the Elian-Arcadian myth the hero, while hunting the Erymanthian boar, was entertained on his way by the centaur Pholos, who lived in a cave on Mount Pholoë. The scent of their communal wine-jar allured the other centaurs, who attacked with rocks and pine branches, but were driven away by the arrows of the archer and compelled to take refuge in the lair of the centaur Cheiron on Malea. This mythological adventure is represented re-

<sup>1</sup> Similar Corinthian kraters: Nos. 1-16, E. Pottier, *Vases antiques du Louvre*, Paris, 1897, pp. 53 ff., pl. 44 ff.: E 616, 620, 623, 627, 628, 629, 630, 631, 632, 633, 634, 635 (Eurytios krater), 636 to 639; No. 17: Berlin 1655, cf. Furtwängler-Reichhold, *Griech. Vasenmalerei*, 121-122 (Amphiaraios Krater); No. 18: Munich, cf. Sieveking-Hackl, *Die Vasensammlung in München*, Taf. 11, No. 344, pp. 29-30; No. 19, New York, Metropolitan Museum, cf. *Bullet. Metrop. Mus. Art*, 1928, pp. 48 ff., figs. 1, 2.

<sup>2</sup> Chest of Kypselos: Paus. V, 17, 5-19, cf. W. von Massow, *Die Kypseloslade: Ath. Mitt.*, 1916 (= 1926), pp. 1-117.

peatedly in ancient art, especially in vase-paintings and in archaic reliefs.<sup>1</sup> The representation on the Pholoë-krater is mostly a narrative one.<sup>2</sup> The love of ornamentational filling is still strongly evidenced by a siren, a badly damaged group of two men, and a flying eagle with a snake in his mouth and claws, by which an open-air scene in the Pholoë region is suggested. The real mythological event is represented by two striding figures of centaurs brandishing pine branches, in whom the attack against Herakles has been expressed;



FIGURE 8. HERAKLES ON A CORINTHIAN KRATER

and by the hero himself and two fleeing centaurs. These three figures, framed between the siren and the common theme of two wrestlers, constitute the most remarkable part of the scene. Herakles is attacking. He is represented without any distinguishing token, not even the quiver being shown, and is running forward in the well-known running and kneeling schema (Fig. 8). The success of his attack is narrated by the vase-painter in the most naïve way, by the flight of the centaurs before a veritable shower of doubly

<sup>1</sup> Roscher, *s.v.* Kentauren: *Lexikon der Mythologie*, II, 1, 1040 ff.

<sup>2</sup> The frieze has nine figures—an eagle, two centaurs, a siren, Herakles, two wounded centaurs, and two men in heraldic scheme.

feathered arrows, some of which are still flying through the air, while others have already reached their target as shown by the abundant loss of blood of the fleeing victims. The centaurs, all represented in the same pose brandishing pine branches, are composed in the archaic tradition of a complete human form with an equine body attached.<sup>1</sup> One of the centaurs is about double the size of the three others—perhaps as an indication that the painter intended him for Pholos or Cheiron.

The frieze of animals in the second register below the Pholoë representation comprises four panthers, three grazing deer or antelopes, and a dancing satyr, in a style and arrangement well known from many other Corinthian vases.

As to the date, the Pholoë krater seems to belong fairly early in the series, if the comparatively squat shape of the vase, the somewhat neglected style, the survival of filling ornamentation, the attenuated bodies, arms and legs are a sufficient criterion. In that case, the first decade of the sixth century would be the approximate time of manufacture.

Next in date to this important piece of the sixth century, comes the fragmentary terracotta revetment with the forepart of a lion and a scene from the battle of the cranes and the pygmies, to be published by Professor M. H. Swindler in a later number of this journal. How this alien piece happened to come to Corinth, whether it was imported from Ionia or made by some Ionian master who settled in Corinth, we are left to guess.

The excavation of 1930 greatly increased our collection of decorated architectural terracottas. A number of painted antefixes were found on the north part of the street, in the west side of the area; many more were scattered all through the area; and some Roman Gorgon-antefixes were found in the well east of the Roman road. After the excellent study of Mrs. Ida Thallon-Hill<sup>2</sup> there is no need of redescribing the painted antefixes, the plastic antefixes, the coping tiles with ridge-palmettes, the eaves-tiles and the combination tiles of all of which a great number were found. Particularly noteworthy, however, are two excellently made and wonderfully well preserved large plastic simas, found among the heap of architectural blocks around the seventeenth pier. Of the first one (Fig. 9) the lion's head is of an extraordinary vigor of expression. The second (Fig. 10) is still more important, for it reveals some novel architectural features. It is a corner block; but its profile at the

<sup>1</sup> Sauer, *s.v.* Kentauren: *Lexikon der Mythologie*, II, 1, 1075; P. Baur, *Centaur in Ancient Art*, Berlin, 1912, *passim*.

<sup>2</sup> *Corinth*, vol. IV, part 1.

left of the lion's head is quite different from the rest, and while there is a plastic decoration of two tendrils of acanthus spray at the left of the head, on the right side and on the return the decoration is painted and consists of alternating drooping anthemias and inward curving flowers.



FIGURE 9. PLASTIC SIMA, FOUND IN THE "THIRD" STOA



FIGURE 10. PLASTIC SIMA FOUND IN THE "THIRD" STOA

These painted terracottas are not to be interpreted as "fill" from the time of the rebuilding of the city under the Romans. Rather, when the stonecutters installed themselves in the ruins to recut the fallen architectural blocks, they first had to remove the great quantity of roof tiles and decorative terracottas which naturally lay on the top. These they piled into heaps; and many were found at the present northern limit of the excavation,—a fact which suggests that many more may still be hidden under the modern road. As to the

building from which the tiles and terracottas were derived, there can hardly be any doubt that they belonged to the last stoa, in which case they date from Hellenistic times. The two great simas especially must belong to this period; and their value resides partly in the glimpse which they afford of the plastic art of Hellenistic Corinth with their vigorous expression in the lions' heads and their emotional and somewhat baroque style.

To the many hoards of gold and silver coins found in different parts of the ancient world<sup>1</sup> our excavation adds the discovery of forty-one staters of Philip II and ten staters of Alexander the Great (Plate VI). Although similar coins have been found elsewhere and the main problems connected with the coinage of Philip and Alexander have been already investigated by the patient and acute researches of E. T. Newell,<sup>2</sup> there is no doubt that the study of the Corinthian hoard by this master of numismatics will contribute to solve at least some minor problems connected with the Hellenistic coinage of the Macedonian kings. A brief preliminary account, however, may be given here.

On the staters of Philip who started the new Macedonian system of gold and silver exchange<sup>3</sup> the obverse always shows a young male head towards right, with short hair and often with a heavy neck. Although the head wears a laurel wreath in which berries are frequently visible, some numismatists prefer to think of Ares, the war-god of Thracians and Macedonians rather than Apollo.<sup>4</sup> On the reverse invariably appears the agonistic type, referring to the king's victories in the Olympic games.<sup>5</sup> A biga is galloping to the right, while a charioteer in a long chiton holds the reins in the left hand and the goad over the horses' heads in his right hand. Below the exergue the king's name is written. Although most of the variations are unimportant, the artistic features of two specimens (Nos. 14 and 40) deserve mention for the vivid action of the galloping biga. The mint mark of the magistrate, who supervised the issue appears

<sup>1</sup> S. P. Noe, "A Bibliography of Greek Coin Hoards" (*Numis. Notes and Monographs*, No. 25), New York, 1925, *passim*. Hoards of gold coins of Philippos II and Alexander III have been discovered in Anadol and Marasesti (Rumenia), Assiut, Larnaca (Cyprus), Sidon, Taranto and Terranova (Sicily).

<sup>2</sup> For Alexandrian tetradrachms, cf. *Amer. Jour. Num.*, 1911 and 1912; "Some Cypriote Alexanders" in *Num. Chronicle*, 1915, pp. 294-322; *The Dated Coinage of Sidon and Ake*, New Haven, 1916; "Tarsos under Alexander," in *Amer. Jour. Num.*, 1918, pp. 69-115; *The Alexandrine Coinage of Sinope*, loc. cit., pp. 117-127; hoards of Kyparissia, Demanhur, Andritsaena, Olympia in *Num. Notes and Monographs*, Nos. 3 (1921), 19 (1923), 21 (1923), 39 (1929).

<sup>3</sup> B. V. Head, *Historia Numorum*<sup>2</sup>, Oxford, 1911, pp. 222 ff.; A. B. West, "The Early Diplomacy of Philip II of Macedon illustrated by his Coins," *Num. Chron.*, 1923, pp. 169-210, thinks that the gold issues do not start after the conquest of Pangaion, but for political-economical reasons only circa 348-344 B.C.

<sup>4</sup> P. Gardner, *A History of Ancient Coinage*, Oxford, 1918, p. 423.

<sup>5</sup> Plutarch, Alexander, 3-4.











8

below the forelegs or the body of the horses. In only three groups of coins (Nos. 8, 10, 13; Nos. 14, 40; Nos. 22, 23, 34) are identical dies discernible in both obverse and reverse. In all the forty-one coins, thirty-three different dies for the reverse are distinguishable. The ten staters of Alexander can all be exactly identified, thanks to Newell's previous studies. The obverse of the staters bears the head of Athena in crested Corinthian helmet, with coiling snake (Nos. 42-50) or lion-griffon (No. 51). The bird-griffon and the sphinx do not occur in our series. The goddess wears a single or double necklace of pearls (except in No. 51) and her hair in corkscrew curls falls loosely about her head (Nos. 42-44; 47-49; 51) or clings in short curly locks tight to the head (Nos. 45, 46, 50). On the reverse, a winged Nike is about to advance left. Her attributes are a wreath in her right hand and in her left the stylis, a symbolic emblem of Phoenician origin.<sup>1</sup> Our ten staters seem to have been minted in Macedonia, in Tarsos and in Salamis on Cyprus. To the Macedonian mint belong Nos. 42-44 (mint mark: trident), No. 47 (mint mark: kantharos), and No. 50 with the elaborate treatment of the loose locks of Athena (mint mark: ear of barley). On these Macedonian staters Athena's locks hang down in more stiff and clumsy corkscrew curls than on the coins from the mint of Tarsos (No. 48: kantharos; No. 45 and 46: trident), but with longer and barbed prongs.<sup>2</sup> Moreover, the Nike on staters of the Macedonian mint stands less gracefully, and the stylis has the projections at the tips of the crossbar turned down.<sup>3</sup> No. 49, the obverse of which resembles a gold stater in Newell's collection,<sup>4</sup> points to Salamis on Cyprus (mint mark: harpê). The most remarkable specimen is No. 51, on which the Nike is of very elaborate form, in high relief, and with a hairdress resembling a Phrygian cap. On this coin alone, the serpent on the helmet has been replaced by the Persian lion-griffon with curled wings and with horns on its head. In this animal every Greek would recognize an allusion to the attack on the Persian royal power.<sup>5</sup> The emblem is limited to the Cilician and Phoenician district and dates from the time of the conquest of Persia. Newell dates the first coin with this symbol, a coin of Sidon, between 333 and 330. Possibly this coin too was minted at Tarsos. The distribution would then be as follows: Nos. 42-44, 47, 50 to the Macedonian mint; Nos. 45, 46, 49, 51 to the mint at Tarsos; No. 49 to the

<sup>1</sup> E. Assmann, "Das Stabkreuz auf griechischen Münzen," *Zeitsch. f. Numism.* XXV (1905), pp. 215-226: the stylis is the war-standard of the Phoenician commander of the fleet.

<sup>2</sup> Newell, *Amer. Jour. Num.* 1918, p. 91.

<sup>3</sup> Newell, in *Num. Chron.*, 1915, p. 307, No. 4, pl. XIII, 4.

<sup>4</sup> G. F. Hill, "Alexander the Great and the Persian Lion-Griffon," *J.H.S.*, 1925, pp. 156-161.

<sup>5</sup> Newell, *loc. cit.*

mint of Salamis. On all these coins the dies of the obverse and reverse are different. It may be added that all the fifty-one staters are in such perfect state of preservation that they seem to have come fresh from the mint. This, however, does not help in the least to explain the presence of the coins under the stoa floor. But the occurrence of a precious gold necklace in the same hiding-spot rather suggests the idea of theft.

This gold necklace<sup>1</sup> (Fig. 11) one of the finest treasures ever found in Corinth, is an outstanding example of the delicate and elaborate

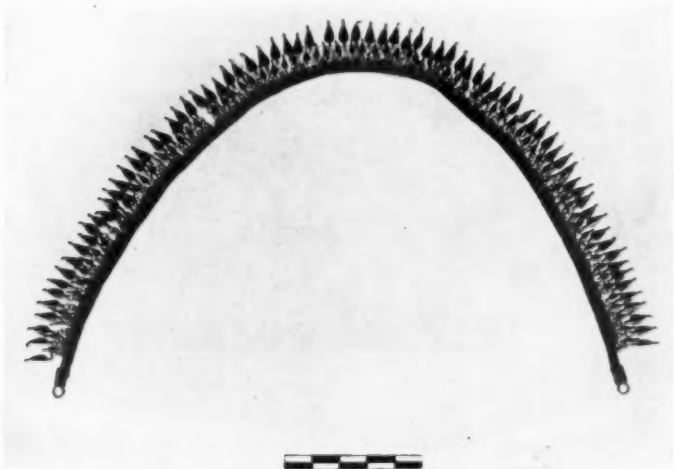


FIGURE 11. THE GOLD NECKLACE FOUND AT CORINTH

art of the Greek goldsmith in the classical Greek centuries. It is a flat, closely woven braid of fine gold threads consisting of four plaited strands, to the lower part of which a double row of pendants is attached for almost the entire length. This braid of woven gold wire is fastened at both ends in a terminal piece made of a little gold plaque folded to form a tiny flat sheath in which a gold nail holds the end of the braid. On the upper side, this tiny sheath displays a lion's head in *repoussé*; and beyond this, a gold ring on a very thin plaque is soldered to serve instead of a clasp. The complete length of the chain is 0.34 m. It would, therefore, have fitted closely round the neck of a grown person, if the two terminal rings were tightly joined by a thread or hook or tiny fibula. Originally there

<sup>1</sup> The necklace is now shown in the classical gold room of the National Museum at Athens under the inventory number 15457.

were seventy-nine pendants in the lower row (two of which have been lost), fastened by a chain of three links to six-petalled rosettes with granulated hearts, attached to the braid. Each petal of the rosettes was once filled with blue enamel. The second row, alternating with the former one, had seventy-eight pendants of smaller size (four of which have been lost), each fastened by a single link to a small circular blossom with granulated heart, one of which is now missing. The pendants in both rows are identical in shape and resemble very much the sharp-edged and trilobed seed or nut of the beech tree in the completely mature and dry state of the fruit. It may be observed that at the present time beech trees are found in the mountainous regions of Thessaly and Epirus, though not in southern Greece.<sup>1</sup> These gold beechnuts terminate at top and bottom in three granules, as though they had been strung between beads.

It is fortunate that the discovery of the necklace together with coins belonging to the opening years of the Hellenistic Age give it an almost certain date in the second half of the fourth century B.C. The date is supported by the consensus of opinion on the similar necklaces known to us.<sup>2</sup> Among these, the most outstanding examples were found in south Russia<sup>3</sup> while others are in the possession of the British Museum,<sup>4</sup> the Metropolitan Museum in New York<sup>5</sup>

<sup>1</sup> The beech, *fagus sylvatica*, is not found in the Peloponnesos (A. Philippson, *Der Peloponnes*, Berlin, 1892, p. 531), but occurs in Northern Greece (A. Philippson, *Thessalien und Epirus*, Berlin, 1897, pp. 140, 151, 297, 314) where the geographical name of Oxyá, the modern Greek name for the beech, is given to a long high range on the eastern border of Aetolia, densely overgrown with these trees. Herein may lie some indication of the origin of the gold necklaces that bear this decoration. Greek terminology, however, did not seem to recognize this imitation of the beechnut; for in temple inventories (Homolle, *Comptes et inventaires des temples déliens* of 279 B.C. in *Bull. Corr. Hell.*, 1890, pp. 404-405; 1891, pp. 130-133) we find the mention of "two necklaces with spearhead pendants, eighty-two (elsewhere, seventy-four) in number" (*δρμος λογχωτός . . . ἀριθμὸς λογχίων* [ΠΔΔΔ|| or ΠΔΔ||]). The resemblance to beechnuts, however, is more obvious than to spearheads, which are more nearly leaf-shaped. Moreover, other necklaces of the fourth century B.C., especially those found in South Russia, have pendants in the shape of acorns or similar nuts, inclosed in a scaly involucre, the cupule. It is perhaps also pertinent to point out that the necklace was found together with Macedonian staters, and that consequently it is at least a plausible hypothesis that the necklace was not of Greek but of Macedonian workmanship, or else made by Greek artisans working in Macedonia.

<sup>2</sup> About ancient jewelry and especially necklaces: G. Karo, Monile: Daremberg et Saglio, *Dictionnaire*, III, pp. 1984-1991 (= 1904); M. Rosenberg, *Geschichte der Goldschmiedekunst auf technischer Grundlage*, Frankfurt a. M., 1921-22, *passim*; summarizing Fowler-Wheeler-Stevens, *A Handbook of Greek Archaeology*, New York, 1909, pp. 345 ff.

<sup>3</sup> S. Reinach, *Antiquités du Bosphore Cimmérien*, 1892, pl. IX, 1 (1 row of beechnuts, necklace ending in plastic lion heads); *Compte Rendu de la Comm. Impér. Archéol.*, 1865, pl. II, 5 (three rows of beechnuts; cf. Stephani, p. 48).

<sup>4</sup> *Catalogue of Jewelry*, Brit. Mus., 1911, Nos. 1943-1946, pl. 34.

<sup>5</sup> Christine Alexander, *Jewelry, the Art of the Goldsmith in Classical Times*, New York, 1928, p. 11, figs. 9 and 12; cf. G. Richter, *The Metropolitan Museum of Art: Handbook of the Classical Collection*, New York, 1927, pp. 327 ff., fig. 231. I beg

and the Bachstitz Gallery.<sup>1</sup> Among all these examples the new necklace from Corinth occupies one of the foremost places for the delicate perfection of its workmanship and the loveliness which taste and care have combined to produce. We can only marvel at the chance which kept it hidden and intact until modern times.

By an almost equally remarkable accident, an important marble head, the only important piece of sculpture found in the excavation,<sup>2</sup> escaped both the mason and the limekiln. In the Greek fill which during the century of desolation had accumulated on the ruins of the stoa, almost down to the floor level, some Corinthian long afterward in the late Imperial Roman times before the final destruction of Corinth<sup>3</sup> had buried a marble head of the Emperor Caracalla. This fine example of early third century portraiture is being published in a separate article<sup>4</sup> by Mr. E. Askew, former fellow of the School. It is, of course, impossible to determine the exact provenience of the statue to which the head once belonged. The occurrence of some coins of Caracalla in the excavated area are topographically irrelevant. It may, however, be observed that the brick building east of the Roman market described in my former report<sup>5</sup> contained niches which indicate an abundant sculptural decoration, and that this brick building dates from the beginning of the third century, and possibly from the reign of the Emperor Caracalla. One must not forget, however, that the third period of the Odeum falls in this same period and that the statue may, therefore, have decorated that structure.

The results of the 1930 excavation, insofar as they affect the architectural history of Corinth, may be summarised as follows:

Further proof was forthcoming to show that the north slope of the temple hill was inhabited in early prehistoric times, through the discovery of flints, neolithic and Early Helladic sherds, and remains of a floor or street. After a long interruption about the end of the first millennium, this area was again occupied in the centuries of the Bacchiads and Kypselids, as indicated by the "archaic" street across the temple hill, the small vases and votive terracottas, and the Pholoë krater. The first monumental building activity does not antedate the fifth century (first stoa, foundations and found-

---

to express my gratitude to the Direction of the Metropolitan Museum for the courtesy with which they provided me with abundant photographic material concerning the jewelry treasures in the Museum.

<sup>1</sup> E. Zahn, *Galerie Bachstitz* II, 's Gravenhage, 1921, pp. 25 ff., No. 91, taf. 22; M. Bieber, *Griechische Kleidung*, Berlin, 1928, p. 89, taf. LXIII.

<sup>2</sup> Other unimportant sculpture: fragment of drapery, a marble foot, and two fragments of steles.

<sup>3</sup> In the fill were found five small bronze coins of the fourth century A.D.

<sup>4</sup> E. Askew, *A Portrait of Caracalla at Corinth*: see below p. 442.

<sup>5</sup> deWaele, *loc. cit.*, pp. 436 ff.

dation cuttings, building H ?). From the last half of the fifth century we have the traces of the second stoa D and the Greek street E (with water basin, channel, and rockcut reservoir). The construction of the third stoa in the beginning of the fourth century caused the disappearance of most of the remains of the preceding stoas, which were certainly less important both in extent and in architectural effect. This third stoa, some 300 feet long, had under its upper colonnaded storey in the western half at least, a basement, of whose walls and piers something has survived. From this period date the gold treasure under the floor and the Hellenistic pottery in the manhole. Most of the eastern half of the stoa was cut away when the Roman market was constructed in the first century after Christ. There are two different periods to this latest stoa: the first one is marked by a much lower level at the extreme east, the second by some changes in the west (removal of the sixth pier) and the creation of a uniform level in the east and by the coat of painted stucco over the hard plaster of the wall. The building was destroyed in 146 B.C.,—an event attested by catapult balls, sling bullets, and arrow heads found among the fallen architectural blocks and the painted terracottas and simas. Sicyonian stonecutters cleared a good deal of the area, immediately after the great destruction. In the century of desolation (146–44 B.C.) earth was washed down by the rains until gradually a high layer of earth was accumulated. In the eastern end the Romans may have re-used some of the material for the construction of their market. Traces of occupation in Roman and Byzantine times in the latest excavated area are comparatively very scanty. The former Greek road, whose north limit was partially marked by an unknown and even problematic sanctuary, was shifted further to the north, and the new Roman street made to pass through the market. A cross-street passed the western end of the former stoa where a Roman well contained Arretine and local imitation of Arretine ware and many lamps.

The double campaign of 1929 and 1930 has thus yielded a peculiarly Greek feature, the classical and Hellenistic stoa, partially supplanted by a peculiarly Roman construction, the paved level market. The varied and important results here briefly presented will be more fully discussed and studied in a final publication, whose completion within a reasonable space of time will be the most adequate expression of gratitude of the author for his good fortune in being entrusted with the supervision of the excavation of this interesting portion of Ancient Corinth.

FERDINAND JOSEPH DEWAELE

AMERICAN SCHOOL OF CLASSICAL STUDIES  
Athens



THE EXCAVATION OF ROMAN CHAMBER TOMBS AT  
CORINTH IN 1931

My excavations in the western part of the North Cemetery at Corinth in 1930 revealed the presence of Roman graves and of prehistoric deposits on the northern slope of the hillock of Cheliotomylos.<sup>1</sup> Sherds of the three Helladic periods are scattered over the surface of this hill indicating a continuity of the occupation of the site. In a search, therefore, for additional prehistoric burials, and



FIGURE 1. VIEW OF HILLSIDE WITH TOMBS

especially for those of the Late Helladic Age, a small investigation was made during the present season under the auspices of the American School of Classical Studies at Athens. The area which was selected for exploration is a hillside located southeast of Cheliotomylos and separated from it by a shallow ravine. The work resulted in the discovery that the entire hillside is occupied by Roman chamber tombs cut in the hard clay and extending beneath the overhanging cliffs. Figure 1 gives a view of this hillside and shows how it faces the Corinthian plain with the Gulf of Corinth and the hills of Perachora in the distance beyond.

Roman remains at Corinth are seldom dissociated from evidences of earlier civilizations and the Greek era was here attested by a fountain house and water-channel which are dated in the fourth century

<sup>1</sup> *A.J.A.* XXXIV, 1930, pp. 404-406, 428-431.

B.C. by pottery and lamps found in a manhole which opened from the channel. Also on the opposite hillside to the west a section of a substantial wall was uncovered, which is preserved to a height of six courses at its highest point. Sherds of pottery and bronze coins of Corinth and of Sicyon which were found at the base of the wall belong to the fourth century B.C. An earlier period is represented by two isolated objects. A trench which was dug on a lower slope of the hill in which are the chamber tombs, shown on the extreme left of the photograph reproduced in Figure 1, yielded pieces of a geometric crater, near which was lying the statuette of a centaur



FIGURE 2. A TERRACOTTA STATUETTE OF AN ARCHAIC CENTAUR

that is illustrated in Figure 2. This is a figurine made of terracotta, of which the length is 0.06 m. and the greatest height is 0.063 m. It has the head and torso of a man but the forelegs and rear body of a horse. The bottoms of the forelegs are broken away, but the ends were undoubtedly like those on the rear legs. The tail and the left arm are missing. The figure is covered with a white slip on which brown stripes are painted about the body and legs. The head is an extraordinary conception. The ears are like the ears of a horse with an upright tuft of black hair between them like a horse's mane. Flat applied discs, of which one is painted black and the other red, represent the eyes. The nose is very long and pointed, the mouth is wide with thick lips, and the hair of the beard is indicated by vertical

incisions. The right arm is bent at the elbow, with the right hand resting on the hip. The left arm was raised and may have held a branch or similar object. The primitive style of the creature and its discovery in association with geometric pottery justify its attribution to that period. Centaurs of early type from Corinth have been previously known from their representation on a gold band which is now in Berlin.<sup>1</sup>

The second object of the geometric period is a one-handed jug



FIGURE 3. A PROTO-GEOMETRIC VASE  
FROM THE CEMETERY

which was found in a grave that was cut in the clay on one side of a chamber tomb. The grave was covered by three Roman roof-tiles, one of which bore the stamp COL·LIVL·COR·AC. This is the abbreviated form of the Roman name of the city, Colonia Laus Julia Corinthus, followed by the name of the maker of the tiles or, perhaps, of a magistrate. Similar tiles have been frequently discovered in the Corinthian excavations. The grave contained, in addition to the geometric jug, fragments of Roman pottery, a bronze loop, and a Roman bronze coin which was so badly worn as not to

be legible. Remains of two skeletons were in the grave one of which lay with the head at the southwest end, and the other and lower one with the head to the northeast. Apparently this is an example of the re-use of an early grave in later times. At least there can be no doubt that the jug is a specimen of proto-geometric ware (Fig. 3). The vase, which is 0.149 m. high with a diameter of 0.10 m., has a small neck and an oval-shaped body. Its thin walls are made of the familiar buff Corinthian clay. The shoulder is decorated with three series of concentric half-circles which are drawn with a compass, and about the body are broad and narrow bands set on with black glaze paint which easily flakes away.<sup>2</sup> The shape, decoration

<sup>1</sup> P. V. C. Baur, *Centaurs in Ancient Art*, p. 5, fig. 3.

<sup>2</sup> E. Pfuhl, *Malerei und Zeichnung der Griechen*, III, p. 2, no. 2. *Corp. Vas. Ant. Grèce*, I, III, H, pl. 1, no. 6; *ibid. Copenhague, Musée Nat.* 2, III, H, pl. 69, no. 5a.

and technique of this jug are entirely different from those of the later geometric vases which have been found in the North Cemetery.<sup>1</sup> It represents a transitional stage between the Late Helladic and the geometric periods.

The Roman pottery from the tombs comprises jugs, saucers and



FIGURE 4. A CALATHUS OF THE ROMAN PERIOD

bowls of red ware which appear commonly in the Roman deposits of Corinth. But among these vases one is conspicuous for its type, shape and clay. This is the calathus or basket which is illustrated in Figure 4. The grave in which it was lying contained also a shallow bowl of red ware and a bronze coin of Caligula. The coin is of the type illustrated in the British Museum Catalogue, *Corinth*, Pl. XVI, No. 9, with the head of the Emperor on the obverse and on the

<sup>1</sup> *A.J.A.* XXXIV, 1930, pp. 409-414.

reverse Pegasus and the name of the duovir Vipsanio. Evidence for date, however, is inconclusive as remains of four skeletons were also in the grave. The calathus, which has a height of 0.18 m. and a diameter, at its top, of 0.164 m., is made of buff Corinthian clay. It is extremely light and fragile, because the walls are thin and are perforated with lozenge-shaped cuttings. These are spaced with considerable irregularity and must have been cut in the clay with a sharp instrument when the vase was in leather-hard condition. The purpose for which the basket was intended to be used is conjectural. It is too fragile to have served as a container for fruit or for any heavy objects, but wool could have been conveniently carried in it and the shape and appearance bear a general resemblance to the wool baskets represented on red-figured pottery.<sup>1</sup> It may also have been employed for holding flowers, since similar baskets appear in pictorial representations of the myths associated with Persephone.<sup>2</sup>

#### THE TOMB WITH THE PAINTED WALLS

Four tombs were excavated three of which were constructed with double chambers. The roofs of all had collapsed through the falling of large pieces of rock from the overhanging cliffs. The tombs are similar in type and their contents indicate that all passed through the same history of use, abandonment and re-use. In one case some of the paintings which decorated the walls have been preserved. As this tomb is also the largest and most elaborate of the group it will be sufficient to describe it as representative of the type. The plan of the tomb, which was measured and drawn by Professor Richard Stillwell, is shown in Figure 5. The entrance is through a doorway built with heavy limestone jambs and lintel. On the front of the lintel are cuttings in the stone for the insertion of marble tablets with the names of the owner and of the members of his family. A socket in the threshold reveals how the massive door was swung inwards giving admission to a large chamber on each side of which a semicircular niche is cut out of the hard clay of the wall. A grave is placed at the base of the niche. The cutting out of the clay was not carefully done with the result that the plan is quite irregular, for the length and width of the room vary with any two terminal points selected for measurement. But on the north edge the length is 4.88 m., and at the east end the width is 4.16 m. There is an additional grave on the north side which at a later period was placed in the

<sup>1</sup> H. Blümner, *Technologie u. Terminologie der Gewerbe u. Künste bei Griechen u. Römern*, 2nd ed., I, p. 117, fig. 41.

<sup>2</sup> Professor Paul Wolters has called my attention to such baskets on the monuments from Locri Epizephyrii, published by Professor P. Orsi in *Boll. Arte*, III, 1909, p. 423, fig. 20; p. 428, fig. 27; p. 465, figs. 32-33.

floor of the chamber in front of an earlier grave which was cut in the wall. A passageway, which seems not to have been closed by a door or gate, leads into an inner chamber which has in its rear wall a grave set in a niche which is approached by three steps. Similar graves are cut in the side walls of the inner room and the one on the south has a single step in front of it. The corresponding step on the north side and part of the lowest step at the end of the tomb have been cut

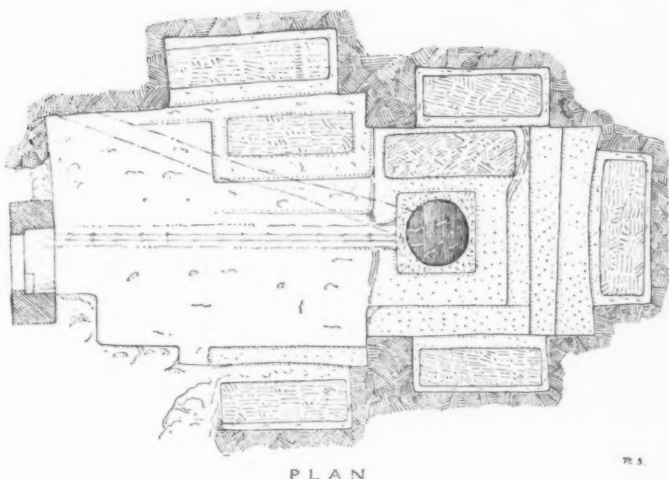


FIGURE 5. PLAN OF THE CHAMBER TOMB WITH PAINTED WALLS.  
Drawn by Richard Stillwell

away to make space for the insertion of a later grave. In the center of the floor a circular well-shaft with a diameter of 0.95 m. is cut to a depth of 2.30 m. where water is encountered. A large underground channel leads from the shaft in a northwesterly direction passing to the north of the entrance portal. Although this channel, which opens from the bottom of the well, is narrow it is sufficiently large to permit the passage of a man. A surface drain covered with curved tiles runs from the top of the well through the centre of the floor of the outer chamber and thence beneath the threshold. No object was found in the earth with which the well was partially filled. It is difficult to find a satisfactory explanation for the presence of the well

in the floor of the inner chamber of this great tomb. If the well had existed and had been in use prior to the construction of the tomb, it is scarcely credible that such a monument should have been erected and that access to it should then have been restricted to the owners of the tomb, as we may judge was the case by the large door at the entrance. The fact that the well is centred with reference to the side walls favors somewhat the view that it was dug after the walls were completed, but it was quite certainly in existence before the construction of the additional grave on the north side. Was the well dug for the purpose of supplying water for the refreshment of the members of the family of the deceased on their periodic visits to the tomb, or has the water in the tomb a ritual significance? The Orphic fragments record that when a soul enters Hades it cries at once for water from the pool of Mnemosyne,<sup>1</sup> and a fragment of Aristophanes refers to the immediate need of the deceased to drink.<sup>2</sup> This need was usually satisfied in burials by the deposit in the tomb of an oenochoe with its liquid contents, and in early graves at Corinth a cup was found in a position close to the mouth of the deceased person.<sup>3</sup> The chamber tomb was an elaborate monument planned and used for many interments and it is probable that the presence of the well here is in some way connected with the rites of the dead.

When the tomb was excavated it appeared that the walls were covered with a coat of white stucco, but investigation in places where the surface was injured showed that beneath the outer layer was an earlier coat of stucco which was decorated with paintings. On parts of the walls the stuccoed face has entirely disappeared and on other parts it has been badly damaged. It does not cling very well to its clay background and, therefore, at an early period suffered injuries which led to the recoating of the entire surface. The removal of the outer undecorated layer of plaster from the battered walls without demolishing the painted coat beneath was a task which required the greatest care and patience. When the remains of the paintings were cleared they were copied in water-color by Miss Mary Wyckoff, from whose copies the reproductions shown in Figures 6, 9 and 10 were made. On the north wall of the outer chamber no stucco is preserved except at the east end of the grave, where a large trident is painted on the transverse wall. The south wall of the room has also fared badly, but it has been possible to decipher the composition which appears on the tympanum of the niche in its main outlines although some details are lacking. Figure 6 shows the balanced

<sup>1</sup> Daremberg and Saglio, *Dictionnaire des Antiquités*, s.v. *Orphici*, IV, p. 254.

<sup>2</sup> Kock, *Com. Att. Frag.* I, p. 517, quoted by G. W. Elderkin, *Kantharos*, p. 7.

<sup>3</sup> *A.J.A.* XXXIV, 1930, p. 406.



group composing the centre of the picture. On either side of a large vase of the shape of a crater a triton is represented as blowing a long reed which he holds with one hand while in the other is a wand. A dolphin headed outward and away from the vase is painted beneath each triton. The colors used are orange and red for the upper parts of the bodies of the tritons, orange for the background of the vase contrasted with stripes, bands and handles in red, and a greenish-blue for the dolphins and for the lower parts of the tritons. Tritons



FIGURE 6. TRITONS, VASE AND DOLPHINS IN THE WALL-PAINTING OF THE OUTER CHAMBER.

From a Water-color by Mary Wyckoff

are often represented on sepulchral monuments, and many instances of this practice are listed by R. Dressler in his article on Tritons in Roscher's *Lexicon of Greek and Roman Mythology*.<sup>1</sup> Dressler also discusses the attributes of the tritons and names among others the attributes which are associated with the Dionysiac ritual, such as the thyrsus, the torch, the cantharus and the crater. The crater appears on the Corinthian painting and possibly a thyrsus should be recognized in the wand-like object which is held by each triton in one hand. Some wavy blue strokes preserved below the dolphins are undoubtedly intended to suggest the water of the sea. If we assume similar decorations on both side walls of the outer chamber of the tomb, as is true for the mural decorations of the inner chamber, then at the east end of the grave a large trident must be restored like that preserved on the opposite wall, and the trident is one of the most common attributes of the tritons.<sup>2</sup>

<sup>1</sup> V, cols. 1193-1200.

<sup>2</sup> R. Dressler, *loc. cit.* V, col. 1179.

The inner chamber of the tomb was originally constructed with a niche for a grave at the end and with one on each side. Figure 7 gives a view of the rear wall with the grave cut in the arched recess. This grave is most conspicuously placed and is approached by broad steps. Without doubt its wall decorations would have been the handsomest and the most significant in the tomb. It is, therefore, the more regrettable that almost none of the stucco is preserved on the walls. But the paintings on the adjoining side walls of this chamber have been sufficiently recovered to permit a comprehension



FIGURE 7. GRAVE CUT IN THE REAR WALL OF THE CHAMBER TOMB

of the subjects and an appreciation of the style of the work (Fig. 8). On each side of the lateral graves a panel is painted with a broad red border, and within the panel an armed Roman soldier is standing (Fig. 9). The soldier at the east end of the north grave is clad in a breastplate, which is painted green to indicate bronze, and wears a kilt of leather and metal strips. He has a plumed helmet on his head, and on his feet high-laced boots. In the extended right hand he is holding a long spear, and the left hand rests on a shield which is standing on the ground. On each side of the soldier tall green shrubs are painted, and in a smaller panel below him there is a similar shrub of broad squat shape. Such plants are used as space-fillers on other paintings in the tomb and occasional red flowers, resembling poppies, are scattered over the background. On the corresponding

panel at the west end of the grave another soldier is painted, but in this case he is nude and carries his shield on his left arm. The back wall of the arched niche of the grave is decorated with a gay group of two peacocks, one standing on each side of a large crater-like vase without handles (Fig. 10). A border of red paint surrounds the field which is sprinkled with poppies and with garlands tied with red ribbons, and again green shrubs are growing from the ground. The peacocks have their wings closed and the tails trailing. The body of the bird is painted a greenish-blue which passes to a deep ultramarine



FIGURE 8. VIEW OF THE NORTH WALL OF THE INNER CHAMBER

on the edges of the wings. The breast of the bird, the legs and tail are painted a reddish-brown color and the "eyes" in the tail are deep blue with an edging of yellow. The vase is painted a golden-orange with its decorations in red. The technique of the work is careless, but the colors are applied with a free sweep of the brush, and the general effect of the tomb with all its walls thus brilliantly decorated must have been one of great magnificence. The paintings on the south wall are similar to those on the north, but as the soldiers are in the same relative position to the grave the nude soldier is on the left as one faces the wall, and is thus opposite the armor-clad warrior of the north side. The decorative symbols in these paintings, the garland and crater, the peacock and poppy, are of frequent occur-

rence on sepulchral monuments and have received their due share of attention and study.<sup>1</sup>

#### THE DATE OF THE TOMB

The problem of the date of the tomb and of its paintings can, fortunately, be solved with reasonable accuracy by the help of the



FIGURE 9. THE PAINTED PANEL ON THE NORTH WALL.  
From a Water-color by Mary Wyckoff

objects found in the chamber and in its separate graves. There are seven graves in the tomb, but two of these are not symmetrically placed in relation to the others and are clearly intrusions on the original plan which is, in fact, partially mutilated by one of the intruders. The graves were covered with large terracotta slabs, and above these slabs and on the steps mounting to the rear niche, on the floor and scattered elsewhere through the tomb were many skeletons,

<sup>1</sup> A tomb at Sardis decorated with similar motives was published by me in *A.J.A.* XXXI, 1927, pp. 19-25, where references to sepulchral symbolism are cited.

and with them the dedicatory lamps which accompanied their burial. One hundred and sixty-two lamps were secured thus from the earth outside of the individual graves, and of this number one hundred and fifty belong to Type XXVIII of the classification of Corinthian lamps made by Mr. Oscar Broneer.<sup>1</sup> As thirteen of the lamps are signed by the maker Chiones, which is one of the most common signatures on late lamps of the type,<sup>2</sup> and as ten are decorated with the Christian monogram, a date in the latter part of the fourth century A.D. seems to be indicated by this evidence. Confirmation of this view is supplied by the coins secured from the



FIGURE 10. THE PAINTING IN THE NORTH NICHE.  
From a Water-color by Mary Wyckoff

group of chamber tombs. The latest of the thirty-five bronze coins of the fourth-century Emperors are three of Arcadius. Nothing later than the fourth century was found in the area. It is clear, then, that at the end of that century some catastrophe occurred which was the occasion of dumping bodies promiscuously into this tomb without gifts or offerings save only the ritual lamp and perhaps the fee of Charon. History instructs us that the political catastrophe which would account for the existing conditions was the destruction of Corinth by Alaric, leader of the Visigoths, in 396 A.D.

The location and contents of the graves furnish additional light on the earlier history of the tomb. The symmetrical construction of the inner chamber was destroyed when a grave was set in its floor on the north side. To provide the necessary space for this grave the

<sup>1</sup> Corinth, IV, 2, *Terracotta Lamps*.

<sup>2</sup> O. Broneer, *op. cit.* p. 117.

step along the north side was cut away, as was also the north extremity of the lowest step at the east end. Such a mutilation of a magnificent tomb could have occurred only after the deaths of the owner and of his immediate family, and the contents of this coffin confirm the evidence furnished by its position to prove it later than the tomb itself. For at the very bottom of this grave were pieces of the painted stucco of the walls. This fact indicates a total disregard for the paintings on the part of those who constructed this grave, and the date of the grave is approximately determined by the dedications which it contained. Besides a glass bottle and a Roman pot three lamps were found in it, each with a signature in Greek letters on the bottom: ΑΟΥΚΙΟΥ, ΚΡΗΚΚΕΝΤΟΚ, ΚΑΕΑΝΔΡΟΥ. The name of the third maker is not certain because the surface of the lamp is badly worn. These lamps belong to Broneer's Type XXVII and range with the earlier examples of that type which continued in use throughout the second century A.D.<sup>1</sup> With due allowance made for the interval of time which must have elapsed between the construction of the tomb and its abandonment and neglect the date of the paintings may be conservatively placed close to the beginning of the second century. It might be expected that the contents of the separate original graves would support this chronology, but their evidence is confused by the fact that they contain multiple burials. So, for example, twelve skeletons were found in the grave at the rear of the tomb, and the north grave of the inner chamber held seven skeletons with offerings of two Roman vases, two bronze rings and a bronze coin of Caracalla. A coin of Septimius Severus was found inside the main doorway at the level of the floor. The presence of these coins of the beginning of the third century A.D. suggests the possibility that the re-stuccoing of the walls dates from this time. But the difficulty about drawing any historical conclusions from the contents of coffins which have been re-used is well illustrated by two graves in neighboring tombs. The grave in which the proto-geometric jug was lying contained also two skeletons, Roman pottery, a Roman coin and was covered by Roman tiles. Another grave, in the fourth chamber tomb, yielded a lamp which is dated before the end of the first century A.D.,<sup>2</sup> but beside it was a coin of the Emperor Arcadius of the end of the fourth century. The probable history of the tomb in brief summary is that it was constructed with its painted walls in the latter part of the first century A.D., that it was sporadically used in the second and third centuries and that it was filled with bodies at the end of the fourth century and not subsequently used.

<sup>1</sup> *Op. cit.* p. 96.      <sup>2</sup> O. Broneer, *op. cit.* Type XXIV, p. 82, pl. X, no. 474.

## THE INSCRIPTIONS

A tomb of this magnificence must have been constructed for a man of wealth and distinction, and the presence of the military guards at each side of the graves implies some official association. This hypothesis is strengthened by the tenor of an inscription which was found in a neighboring tomb. This inscription, a photograph of which is reproduced in Figure 11, is cut on a thin plaque of Hymettian marble the dimensions of which are: 0.275 m. in length, 0.18 m. in height and 0.018 m. in thickness. The incisions for the letters were filled with



FIGURE 11. EPITAPH FROM A CHAMBER TOMB

red paint much of which still remains. An effective color combination was thus secured by the contrast of the red letters with the blue marble background. On each side of the plaque are two holes for dowels by which it could be fastened in a cutting in a stone block. The inscription reads:

V. L. Coranus  
 Patrobius sivi  
 et vivis Grania  
 Homonoia uxori et Clo  
 dio Euphemo Clodio Graniano  
 Clodia Homonoia Pri  
 vgnos posterisoue  
 suis



This sepulchral monument which records the dedication by L. Coranus Patrobius of a tomb to himself and to the surviving members of his family and to their descendants is particularly interesting because one of the sons, Clodius Granianus, was proconsul of Achaia in 118 A.D.<sup>1</sup> This is additional confirmation of the evidence already adduced for placing the time of the construction of these tombs in the last quarter of the first century and for attributing them to wealthy and official families of the state. Little comment on the epitaph itself is required. Some of the forms betray the influence



FIGURE 12. INSCRIBED PLAQUE FROM A TOMB

of its Greek environment. Thus the dative feminine lacks the final E, and the B in sibi is written as V. Less excusable are the errors in the line before the last. The initial V is apparently an abbreviation for votum or votivum.

Similar sepulchral formulae have already been noted at Corinth,<sup>2</sup> and a dedicatory plaque of related type was discovered in the season of 1930 in a chamber tomb on the north slope of Cheliotomylos. Another example on a slab of white marble was found this year in a pit just north of the painted tomb. Although this inscription had been thoroughly broken, as may be seen from the photograph of it reproduced in Figure 12, only a few small pieces are missing. The dimensions are: length 0.40 m.; height, 0.36 m.; thickness, 0.017 m. As in the case of the preceding inscription, two dowel holes are

<sup>1</sup> *I.G.* III, 61.

<sup>2</sup> *C.I.L.* III 541. Compare also L. R. Dean in *A.J.A.* XXVI, 1922, p. 475, no. 64.

present on each side by which the plaque could be securely fastened in a wall. The epitaph reads:

V. M. Aenius  
Onesiphorus sibi et  
vivis Call. anae Hilarae  
uxori et. Aenio M f Aem  
Onesiphoro P f posterisquis

The phraseology of the dedication is almost identical with that of the epitaph of Coranus. Again the inscription is begun with the



FIGURE 13. GRAVE OF MARIA, WIFE OF EUPLOUS

letter V and again the tomb is dedicated to the owner, his wife, children, and heirs. The name of the wife is not certain. I have thought of Calliana, but with allowance for a very small bottom bar on the L there is space for a larger letter or for an additional letter in this break. There seems also room for a letter before Aenio in the fourth line, and the letter before F in the last line is uncertain. This inscription furnishes no clue for the determination of its date. The general type of formula was in use over a long period, since the inscription found in 1930 is dated early in the first century by the names of the duovirs, Priscus and Pollio, which it mentions. Because of the narrow and elongated shapes of the letters the Aenius dedication has the appearance of being later than that of Coranus.

#### THE GRAVE OF MARIA, WIFE OF EUPLOUS

Almost all the graves in this area contained more than one burial and, therefore, the exception of the grave of Maria, wife of Euploous,

is the more remarkable. Figure 13 shows the grave which was constructed of bricks cemented together and had a cover made of two large slabs of poros. The grave was oriented east and west and contained only one skeleton which lay with its head at the western end. There were no offerings placed with the body, but on top of the cover at one end was a thin layer made of clay and of pieces of brick to which an inscribed plaque of blue marble had been ce-



FIGURE 14. GREEK INSCRIPTION FROM THE COVER OF A GRAVE

mented.<sup>1</sup> The Greek inscription, which is illustrated in Figure 14, is here transliterated:

Ἐνθάδε κίτε Μαρία σώφρων γυνή  
Εὐπλου ἡνιόχου ὃς ἀγοράσας τὴν  
ληνόν, Εὐπλους παρὰ Ἀναστασίου  
ὑπρέτου, χρυσίου ἐνὸς ἡμυσι καὶ  
δοῦς τὰς τιμὰς Ἀναστασίῳ καὶ λαβὼν  
ἐξουσίαν παρ' αὐτοῦ ἐπέθηκα τὸν  
τίτλον. ἐτελεύτησεν δὲ ἡ μακαρία τῇ  
πρὸ 1Α καλανὸ [ῶν] Σεπτεμβρ [ίῳν].

Here lies Maria, the modest wife of  
Euplous Heniochos (the driver), who  
bought the coffin, Euplous from Anas-  
tasiaus the servant, for a gold piece and  
a half, and paid the price to Anastasiaus  
and received authority from him and  
then placed on it the epitaph. But the  
blessed one died on the 11th day before  
the Kalends of September.

The presence of the three crosses on the stone marks this as a Christian epitaph. The detail with which the purchase of the grave is recorded indicates the desire of the dedicator to establish his claim

<sup>1</sup> The dimensions are: length, 0.378 m.; height, 0.348 m.; thickness, 0.025 m.

to complete ownership, and may have been inspired by the common practice in the neighborhood of making multiple burials in a single coffin. The owner, however, does not go to the extreme, sometimes to be observed on the monuments, of invoking curses and fines on potential violators. The price paid for the grave,  $1\frac{1}{2}$  gold pieces, seems to have been a standard price, for the same amount is recorded on another Christian inscription which was seen by L. Ross near Sicyon.<sup>1</sup> This inscription, which is said to be not earlier than the fourth century, has a cross at its beginning, and also uses the word χρύσιος for the gold piece. The formula for stating the day of decease is a common one on later Greek sepulchral monuments, and the practice of representing the word πρό in some form of ligature has been frequently attested.<sup>2</sup> The date of Maria's grave may be determined within close limits. Just above the cover were lying six lamps, which, with one exception of Type XXXI, belong to Broneer's Type XXVIII. One of them is signed by Chiones, who has already been mentioned as a prolific maker of late lamps of the type,<sup>3</sup> and many of whose products were found with the promiscuous external burials of the painted tomb. A date at the end of the fourth century is indicated, but it must also be prior to the mass burials following Alaric's slaughter in 396. Therefore a date between 380 and 395 cannot be far from correct.

#### THE COINS FROM THE TOMBS

This brief account of the excavation of these interesting Corinthian tombs may be concluded with a list of the coins which were found in or near them. Of the 61 legible bronze pieces 9 are coins of the fourth and third centuries B.C. from Greek states, distributed as follows: five of Corinth, and one each of Athens, Macedon, Pellene and Sicyon. Eight of the eleven Imperial Roman provincial coins are Corinthian of reigns from Augustus to Septimius Severus, one is from Athens and there is also a coin of Caracalla of Argos and one from Lacedaimon. The coins of the reigns from Aurelian to the end of the fourth century number thirty-nine. There are only two Byzantine pieces which are of a fairly late period (Constantine IX). Evidently there was no encroachment on this area subsequent to the disaster which overwhelmed Corinth at the end of the fourth century.

THEODORE LESLIE SHEAR

PRINCETON UNIVERSITY

<sup>1</sup> I.G. IV, 437. The standard gold piece in the latter part of the fourth century was the solidus, and  $1\frac{1}{2}$  solidi would have purchased about six bushels of wheat. The purchasing power of the solidus is discussed by Angelo Segré, *Metrologiae Circulazione Monetaria degli Antichi*, pp. 452 ff.

<sup>2</sup> C.I.G. IV, 9494, 9495, 9547, 9591, 9600, 9692.

<sup>3</sup> O. Broneer, *op. cit.* p. 117.

A PORTRAIT OF CARACALLA IN CORINTH

DURING the American School's excavations at Corinth in the spring of 1930, a life-sized portrait head (Figs. 1 and 3) was discovered by Dr. Josef de Waele in a Roman deposit within the Hellenistic Stoa, north of the Temple of Apollo. It is clear, from technical observations, that the head belongs to the first quarter of the third century

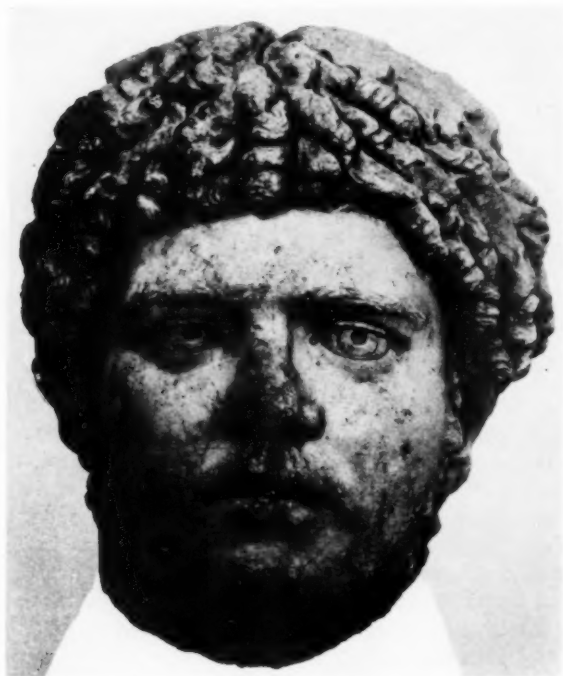


FIGURE 1. PORTRAIT HEAD OF CARACALLA IN CORINTH

A.D. and that it is a stylistic intermediary between the "relief" portraiture of the Antonines and the surface work of Alexander Severus and the third century in general. Its interest is historical. The representation is that of a normal young man, of perhaps twenty years, with a bullet-like head, wide-open witless eyes, thin moustache and beard, and a dense mop of hair. The eyes and some elementary

modelling around the mouth produce a minimum of expression in the head which, otherwise, is almost as simple in its forms as work of a more classical period.

The measurements show the extraordinary compactness of the head:

Full height . . . . .	0.285 m.
Height from chin to top of head . . . . .	0.255 m.



FIGURE 2. PORTRAIT OF CARACALLA IN NAPLES

Full width . . . . .	0.25 m.
Width of face . . . . .	0.17 m.
Length of face . . . . .	0.175 m.
Diameter of neck . . . . .	0.16 m.

The fracture occurred on the neck, so close beneath the chin that it is difficult to ascertain in which direction the head was turned on the body. Apart from insignificant abrasions, the only noticeable damages are in the pulverized texture on the tip of the nose and on the strands of hair above the forehead. The Pentelic marble,

of ordinary quality, was polished on the facial surfaces and finished in the iris and hair with a slight granulation, probably for the reception of colour.

In the structure of the face, the forehead is unusually low and lined horizontally, without emphasis, by soft modelling. The profile breaks from regularity only with the depression at the bridge of the nose. The lips are badly overmodelled. The eyes give a



FIGURE 3. PORTRAIT HEAD OF CARACALLA IN CORINTH

staring expression because of the shallowness and clumsiness of the chiselled incisions and the gouged holes for the pupils.

It is in the hair and beard that two distinct techniques are discernible. The high Antonine mass of hair is broken up into unitary strands, isolated from each other by deep courses of the drill and somewhat patternized with a corkscrew tooling of both drill and chisel. A drill hole marks the end of each spiral strand. The second technique, belonging to the third century style, is the plain



surface tooling, with the chisel, in the eyebrows, moustache, and beard, which the use of colour must have strengthened.

On the top of the head, nine holes, with no particular design, have been dug down with a drill of 0.004 m. diameter. The lack of other marking on the marble and the high and centered position on the head preclude the use of any known type of crown. The



FIGURE 4. PORTRAIT OF CARACALLA IN BERLIN

protective *μηνίσκος*, or nimbus, was probably limited to one hole for insertion. An adequate explanation is that these are drill holes left by the sculptor when he cut the rough piece of marble down to the desired surface; all are grouped together on the comparatively flat area at the very top, whereas those on the sides were worked away with the greater depth. Each hole is hidden as deeply as possible in a furrow.

The conviction, admittedly personal, that this portrait represents Caracalla in his early manhood is based on a physiognomical com-

parison with the two certain types of that emperor's portraiture: the one, a boy long called Annius Verus, of which the best examples are in the Vatican <sup>1</sup> and in Naples <sup>2</sup> (Fig. 2); the other, a violent man, with variants within the type, famous through the busts in Naples <sup>3</sup> and Berlin <sup>4</sup> (Fig. 4). The difference between the portraits of the youth and those of the man is as incredible as his contemporaries found the change in the youth and manhood of the man himself.<sup>5</sup> The Corinth head fits well into the strange development with the basic shape, the heavy neck, the short and perpendicular brow, the flabby and broad chin, and, above all, the shallow but fleshy modeling around the eyes. The Corinth head is, naturally, much closer to the youthful type of Naples than to the older one of Berlin. The high, boyish coiffure is the best argument against a possible identification as Geta who, in numismatic portrayals, always has the hair packed low on the head.<sup>6</sup> An obstacle in the way of certainty has been the bust of a youth in the Palazzo dei Conservatori,<sup>7</sup> which was found on the Esquiline and called, with some reticence, Caracalla; but the youth here represented has the Geta style of hair and a thin, weak chin which could not belong to the known Caracalla. This head, I believe, must be related to the Capitoline Geta <sup>8</sup> and identified either as Geta or as a contemporary; there can be no doubt that the two belong together.

There is extant only one other portrait of Caracalla of certain Greek provenance,<sup>9</sup> the colossus in the Louvre from Drama in Macedonia. It is interesting to note that, in the same excavations of the Hellenistic stoa from which the portrait head was recovered, several coins of Caracalla were found, all picturing him as a young man comparable in age and shape of head to the portrait.

The identification obviously cannot be proved, especially now when the study of the portraiture of the period is so incomplete. If it is accepted, a reasonable date for the Corinth portrait can be suggested since we have the likeness of Caracalla in 208 A.D. on the coin of the campaign in Britain, the first in which the young man has

<sup>1</sup> Sala dei Busti, No. 347; Amelung, vol. II, p. 534, Taf. 69; Jacobsen, *Rev. Arch.* 1903, I, p. 121; Hekler, No. 217a; Bernoulli, *R.I.* II, 2, p. 200, Taf. I.V, a and b.

<sup>2</sup> Ruesch, *Guida* No. 1034; Bernoulli, *R.I.*, II, p. 201, No. 6.

<sup>3</sup> Bernoulli, *R.I.* II, 3, p. 50, No. I; Ruesch, *Guida* No. 979.

<sup>4</sup> Bernoulli, *R.I.* II, 3, p. 54, No. 56, Taf. XX.

<sup>5</sup> *Scriptores Hist. Aug.*, Ant. Caracalla, II.

<sup>6</sup> See Bernhart, *Handbuch zur Münzkunde der römischen Kaiserzeit*, Taf. 13; also Taf. 12, No. 8, where young Caracalla and Geta are represented together.

<sup>7</sup> Cat. Pal. Conservatori, Gall. 5, pl. 27. Compare with portraits on coins, Bernhart, *op. cit.*, Taf. 13.

<sup>8</sup> Cat. Capitoline, p. 204, No. 54; Bernoulli, *R.I.* II, 3, No. 3 and p. 60, Taf. XXI.

<sup>9</sup> Cat. *Sommaire du Louvre*, p. 63, No. 996; Bernoulli, *R.I.* II, 3, No. 40. Bernoulli's No. 65, mentioned in *Bullet.* 1866, p. 111, from Melos, is either lost or did not represent Caracalla.

beard and moustache.<sup>1</sup> The Corinth representation might fall even earlier, perhaps in 206 A.D., when Caracalla was eighteen years old, at the very beginning of his rapid progress toward the madness at the end of his reign.

ESS ASKEW

ATHENS

<sup>1</sup> Bernhart, *op. cit.* Taf. 71, No. 2.

1931  
January-June

## ARCHAEOLOGICAL DISCUSSIONS<sup>1</sup>

### SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

EDWARD H. HEFFNER, *Editor*

*University of Pennsylvania, Philadelphia*

### PREHISTORIC AND CLASSICAL

#### EGYPT

**Egyptian Axe.**—In *Ann. Arch. Anth.* xviii, 1/3 (March 1931), pp. 3-5 (pl.), the late H. R. HALL supplements and corrects certain misleading conclusions reached by earlier discussions of an Egyptian axe in the British Museum. The instrument, Hall argues, is perhaps the earliest representation of horsemanship, belonging to the years 1580 to 1450 B.C.

#### ASSYRIA AND BABYLONIA

**Rare Bronze Coin.**—In *R. Num.* xxxiv (1931), p. 1, Col. ALLOTTE DE LA FUYÉ publishes a rare bronze coin discovered in the recent excavations at Susa, which he attributes to Phraates II. On the obverse is a male bust in side view, and on the reverse, a Greek divinity, types obviously of Seleucid origin.

**Studies in Ancient Oriental Art.**—In *Archiv für Orientforschung*, vi, 2/3 (1930), pp. 59-65 (2 pls.; 7 figs.), DIETRICH OPITZ discusses: (1) The rendering of human hands in the Babylonian art of the third millennium as a criterion for dating. Up to the period of Gudea (ca. 2400 B.C.) the left hand is placed in the palm of the right hand, whereas after Gudea the position is generally reversed. It must be borne in mind, however, that other stylistic details, such as facial features, dress, and the position of the feet, must be shown to correspond to the artistic conventions of the given period if the dating is to be considered as reasonably certain. (2) A cylinder seal of the third millennium pictures on the same register the slaying of a god and the erection of a divine palace. Since these two episodes are described as interdependent in the sixth tablet of Creation, it follows that the Epic of Creation had not changed much in its important details in the two thousand years that led up to its final redaction in the first millennium B.C. (3) A badly weathered limestone stele, now in the Berlin Museum, depicts a primitive writing scene. The date of the stele appears to be the latter half of the third millennium, which would thus make the writing scene the oldest known from Babylonia. (4) A comparison of the Stele of the Vultures with contemporary sculptures from

<sup>1</sup> The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor HEFFNER, Editor-in-charge, assisted by Professor SAMUEL E. BASSETT, Professor CARROLL N. BROWN, Miss MARY H. BUCKINGHAM, Professor SIDNEY N. DEANE, Professor ROBERT E. DENGLE, Mrs. EDITH HALL DOHAN, Dr. VLADIMIR J. FEWKES, Professor HAROLD N. FOWLER, Dr. STEPHEN B. LUCE, Professor RALPH VAN DEMAN MAGOFFIN, Professor CLARENCE MANNING, Professor ELMER T. MERRILL, Professor LEWIS B. PATON, Professor JOHN C. ROLFE, Professor KENNETH SCOTT, Professor JOHN SHAPLEY, Professor EPHRAIM A. SPEISER, Professor FRANCIS J. TACHAN, Professor AXEL J. UPPVALL, Professor SHIRLEY F. WEBER, and the Editors.

No attempt is made to include in this number of the JOURNAL material published after June 30, 1931.

For an explanation of the abbreviations, see Vol. xxxiv, 1, p. 124, and Vol. xxix, 1, pp. 115-116.

Ur favors the conclusion that the warriors of Eannatum did not carry shields, as was hitherto generally assumed, but merely coats reinforced with metal buckles.

**Babylonian Ceramics.**—In *Faenza*, xix (1931), pp. 49-52 (5 figs.), is a brief description of the splendid ceramics used in the reconstruction of the palace of Nebuchadnezzar recently opened to the public in the Berlin Museum, making accessible the finds of the Babylonian excavations of 1917. Along the so-called Street of the Processions and on the Double Portal are tiles marvelously decorated with lions, bulls, and dragons. The beautifully colored ceramics of this monument will furnish most interesting study.

#### SYRIA AND PALESTINE

**Hittite Inscriptions and Mycenaean Greece.**—In *R. Ét. Gr.* xliii, 202 (July-September 1930), pp. 279-294, M. FORRER discusses the discovery of Mycenaean Greece in the cuneiform inscriptions of the Hittite empire. Forrer, in an address made before the *Société asiatique et des amis de l'Orient*, tells of having been the one to unpack these inscriptions upon their arrival at Berlin. He set about to list place names, finding about 200, and to sketch the limits of territory involved (in the second millennium B.C.). Ahhijava is mentioned in these texts along with the names of Egypt, Babylon, and Assyria, whose kings regard the king of Ahhijava as a brother "great king" and so address him. This country (once it is referred to as Ahhija) is by the author identified with the empire elsewhere in the texts known as "the sea." Such proper names as, e.g., Ant(a)râvas, Tavag(a)-lâvas, Atarissias, T(a)roisa, all of which play no unimportant part in the texts, are by M. Forrer identified with Andreus, Eteocles, Atreus, Troja; to which, it must be conceded, they all appear to present some parallels. The theory is interesting. M. Forrer has been at this work now for some years; time alone will tell if it is, as to many no doubt it appears, "too good to be true."

#### ASIA MINOR

**Anatolica Quaedam.**—Under this caption, in two instalments, W. M. RAMSAY comments on various points in the history, geography, and archaeology of Asia Minor, with his reasons for differing from other scholars on some of them. I and VII: Isaura Nova, which Servilius captured in 75 B.C. by diverting its water supply, was on the now uninhabited ridge on the east side of a small stream dividing it from the modern village of Dorla, which has shared the scientifically attested gradual desiccation of the Anatolian plateau (see *A.J.A.* 1929, p. 549). II and V: Honey and oil-of-beeswax are healing ingredients in salves and ointments mentioned in an inscription copied by Sterrett in the upper Eurymedon valley and on some small bronze tesserae used as an advertisement by an apothecary connected with the temple at Ephesus. The divine function of healing belonged especially to the bee-goddess here. III: A large iron seal found in Pisidian Antioch in 1927 pictures the three saints, Neon, Nicon, and Heliodorus, who were martyred here under Diocletian and to whom the first Christian church was dedicated. A curious small apse at the side of the main apse perhaps encloses the space where Paul and Barnabas sat when they visited the synagogue which preceded the church on this spot. IV: The head from a statue of Augustus found in Antioch is unshaven, i.e., mourning, and suggests the earlier date, 25 or 24 B.C. instead of 20, for the founding of the Colonia Caesarea here by Augustus, since the death of Marcellus occurred in 23. VI: An inscription of A.D. 212, from a mosque in the Söbhan district of Phrygia, in which a certain Papias forbids the further use of a family tomb or Heroön to any relatives but himself and his children on pain of a fine to "the image of the emperor," is evidence of the extent to which the Roman

emperor inherited, along with any land that became his imperial estate, also the divine nature of the god who formerly owned it. In an inscription of the Hyrgaleis, of about A.D. 100, the divine icon (of the emperor) is associated with the Hyrgallian Apollo and the Amazons of Cybele. VII: A square block with a head of the bearded Hercules in high relief is apparently a street sign, and adds another title, Hercules Street, to the list of known *vici* in the colonia. The two city squares were Platea Augusta and Platea Tiberia. IX: The *τοῦ εὐμένου* in a fragment of an inscription, which led D. M. Robinson to infer an unknown cult of King Attalus, much more probably refers to a Beneficent God than to a Pergamene king. X: Temple buildings on the plateau of Asia Minor seem to be all of Roman origin, the native places of worship being caves or recesses in rocks and mountains. On a small temple at Dionysopolis on the Maeander, dedicated to the gods of the country by a freedman of Vibia Sabina, wife of Hadrian, who died in A.D. 136, her name appears, as the earthly manifestation of the Mother-goddess. XI: The inhabitants of the upper valleys of the Maeander and the Lycus have been stationary for many centuries and under many masters. One of their ancient owner-divinities was Lairbenus. Their goddess Leto, the Ephesian queen-bee, had a body shaped like an ovary. Their numerous inscriptions, both sacred and civilian, are in barbarous Greek. (*J.H.S.* xlviii (1928), pt. i, pp. 46-53; l (1930), pt. ii, pp. 263-287.)

**Danubian or Anatolian?**—A careful examination of the ceramic evidence recently cited (by Dr. Frankfort, *Studies in the Early Pottery of the Near East*) to prove a great influx of population from the Danube basin across the Balkans into Greece about the end of the first Thessalian Neolithic period, shows so wide an area in which the same analogies hold good, extending to Crete, Spain, and even to pre-Dynastic Egypt, that this theory is clearly untenable, and the opposite theory, of a gradual movement of peoples westward from Anatolia into the mainland of Greece and south-central Europe, is strongly enforced. The band of running spirals encircling a vessel, which is common in the Danube country, is apparently developed from the zig-zag pattern of a sling of plaited grass around a gourd, and the gourd, which was undoubtedly the model for many ceramic forms, is at home south of the Balkans. The suggested migration from Asia Minor into the Danube basin accounts for the almost complete break in culture which follows the late Paleolithic period there. A peasant population, moving slowly onward from the East as its crude methods of agriculture exhausted the soil, filled up a region from which the earlier inhabitants had disappeared. The earliest pottery, black carboniferous ware, is found at the periphery of such a movement extending in all directions from some as yet undefined centre in Anatolia, and the successive later wares have correspondingly shorter radii of distribution. (*V. G. CHILDE, J.H.S.* l (1930), pt. ii, pp. 255-262.)

**Note on an Inscription from Miletus.**—In *B.C.H.* liv (1930), pp. 241-244, E. DERENNE comments on an inscription from Miletus, published by Wiegand in the seventh preliminary report of the excavations. This inscription is a decree, relating to a festival in honor of Eumenes II, to be celebrated upon his birthday every year. The writer makes comments upon the explanations of Wiegand, Ziebarth, and Rehm, regarding the reference to the gymnasium in the inscription, and differs with the conclusions that they have reached.

**Where Was Keftiu?**—A vigorous and detailed argument to prove that the common assumption of the equivalence of Keftiu in Egyptian art and records with Crete is unfounded and that the archaeological evidence, such as it is, favors a district in southern Asia Minor and a culture in contact with that of northern Syria and the Hittites, if not actually identical with that of the later Philistines,

is published by G. A. WAINWRIGHT in *J.H.S.* li (1931), pt. i (pp. 1-38; 24 figs.). The cut and decorative patterns of the kilts worn by the various East-Mediterranean peoples are an important part of the evidence. Furthermore, in the Egyptian paintings, sculptures, and inscriptions, Crete and the Cretans are included in the islanders and the islands in the midst of the sea, and sometimes associated, but never identified, with the Keftians. In the Septuagint, Keftiu and the Keftians are called Cappadocia and Cappadocians, which suggests that these names and that of Caphtor, the place of origin of the Philistines, may be etymologically equivalent.

### GREECE

**Ancient Lead Anchors.**—Some leaden anchors in museums in Berlin, London, Madrid, Marseilles and Athens, are published in outline and described by F. MOLL in *Arch. Anz.* 1929, pt. 3/4 (cols. 266-277; fig.). They have no curved flukes but are huge bars of lead cast about a slender core of wood and having a box-shaped enlargement in the middle, into which a wooden shaft once fitted. Some are inscribed in Greek or Latin with the name of a protecting divinity or of the owner. Five of them found in a row at even distances off Tunis may have belonged to a single ship. With their great weight, varying from 125 kg. to over 700 kg., when lying flat on the bottom of the sea they would sink into the sand, or if dragged along would bank up the loose material and become fast.

**Early History of the Macedonians.**—In *Arch. Eph.* 1927-1928 (issued 1930), pp. 210-218, A. D. KERAMOPOULLOS publishes a paper communicated to the Greek Academy in 1929 on the early history of the Macedonians. The Ionians, like the Achaeans, the Boeotians, or the Dorians, were a branch of a northern race. They moved southward at approximately the same time as the Achaeans.

**Homeric Problems.**—In *Arch. Eph.* 1927-1928 (published 1930), pp. 185-203, S. MARINATOS publishes a series of notes on Homeric problems. As regards the date of the poems, since writing is unknown in them, they may best be assigned to a period intermediate between the time when the Cretan-Mycenaean script fell into disuse and that in which the Phoenicians introduced a new system of writing. It is a Bronze-Age civilization which is reflected in the poems, but since the architecture of Homer is simpler than that of the Cretan or Mycenaean palaces, we must conclude that the bards told of the memories of bygone days rather than described monuments which they knew. The shield of Achilles, although it contains Anatolian elements, is fundamentally Mycenaean. Homeric similes imply a knowledge of Minoan-Mycenaean works of art. More Eastern elements appear in the *Odyssey* than in the *Iliad*. The Odysseus saga recalls that of Gilgamesh; the gardens of Alkinoos are somewhat parallel to the hanging gardens of Babylon; architectural details suggest those of neo-Babylonian palaces; the words *κναροχαίτα* and *κίᾱραι ὀφρῆς* suggest the technique of Mesopotamian sculpture; Homeric geography and Homeric magic find their nearest parallels in Eastern thought. These Eastern elements in Homer may best be explained by saying that at the end of the Mycenaean period, the Greeks fled before the Dorians to Asia Minor, within the sphere of Eastern influence.

**Artemis Orthia.**—A dozen small objects of bone, from the British excavations at the shrine of Artemis Orthia at Sparta, which reached the Museum der Klein-kunst in Munich by a surreptitious route in 1911, are illustrated and described by R. M. DAWKINS in *J.H.S.* l (1930), pt. ii (pp. 298-299; pl.). They are: a rectangular figure of the goddess in relief, a four-faced seal with cylinder attachment for suspension, two couchant animals with an intaglio of a bird on the base, five small discs carved on both sides, and a flat square with incised decoration. All of



these are similar to objects illustrated in the official publication of the excavations, *Artemis Orthia*. The collection includes also the bow of a bronze fibula in the form of a couchant lion, and some scarabs of bone and paste.

Evidence found since the publication of the book shows that the iron spits which were the earliest Spartan currency continued in use, at least for ritual purposes, as late as the fourth century.

**Concerning the Spindle of Ananké.**—In *R. Arch.* xxxii (1930), 58-64 (pls. VI-VII; fig.), PIERRE-MAXIME SCHUHL suggests that the symbolic use of the spindle in Plato's treatment of astronomy may be the result of his acquaintance with ancient representations from the Orient; in archaeological finds from Ephesus and Nimroud we may have two stages in the route by which such Oriental themes entered Greece.

**Iphigenia in Tauris.**—The story of Iphigenia and Orestes in Tauris is represented in scenes apparently taken from the drama of Euripides in numerous Pompeian wall-paintings, south Italian vases, and Roman sarcophagi, and the similarities in single figures, groups, and accessories are such as to indicate a common original for them all. The scenes presented seldom agree strictly with single scenes in the play, for they show such inconsistencies as Thoas present at the recognition of brother and sister and the flight to the shore, and Orestes wearing the victim's crown before his condemnation. This mixture of elements may be due to the fact that the original work, a Greek wall-painting, was a series of contiguous scenes such as we see on the sarcophagi. Since the older vase-paintings are dated not far from 390 B.C., this painting must have belonged to the early years of the fourth century and possibly to the poet's own life-time. The most recently found and most elaborate of the representations is on the wall of a house near the Via dell' Abondanza in Pompeii. In the entrance of a magnificent temple stands Iphigenia holding a laurel branch and the image of the goddess, while two attendants on either side bear salvers with laurel twigs. On a lower level are, at the left, Thoas seated, with a Scythian attendant behind him, and on the right, Orestes and Pylades with hands bound behind. Within the shadowy interior of the temple is seen the statue of the goddess on a pedestal. We have here not an incident from the drama, but a theatrical presentation of the characters without action. The architectural background is on so large a scale and so elaborate as almost to overshadow the human figures in interest. (E. LOEWY, *Jb. Arch. I.* xliv (1929), pt. 1/2, pp. 86-193 (pl.; 18 figs.).)

**Notes on Movements of Troops at Philippi.**—In *B.C.H.* liii (1929), pp. 351-364 (pl. XXII; 2 figs.), PAUL COLLART discusses in detail the preliminary troop movements of Brutus and Cassius on the one hand, and the forces of the triumvirs on the other, before the battle of Philippi, taking exception to the theories of Heuzey and Kromayer, and attempting to follow more closely than they the account of Appian.

**The Preliminary Initiation at Eleusis.**—In *B.C.H.* liv (1930), pp. 51-74 (pl. II), P. ROUSSEL attempts to outline the preliminary rites to which candidates for the mysteries at Eleusis were required to conform. These rites constituted the *μυσταίς*, and were followed, in the mysteries themselves, by subsequent ceremonies of initiation—the *τελετή*, or first degree, and the *επορτεία*, or second degree. The candidate first sacrificed a young pig, and then, veiled, with his feet on the skin of a ram, was purified by a priestess, who held a winnowing basket, or a torch, over his head. These lesser mysteries were held twice a year, the later ones immediately preceding the greater mysteries, to enable strangers to undergo the preliminary rites in connection with the greater ceremony. It is still hardly possible to reconstruct with any degree of accuracy the greater mysteries, but

the writer believes them to have had a generative function, to regenerate the initiates, and assure them of happiness in the life beyond the grave.

**The Presage of Cleomenes.**—In *R. Ét. Gr.* xliii, 202 (July–September 1930), pp. 262–278, CH. PICARD discusses this subject. Adverting to the recent architectural discussion of the character of the tympanum sculpture of the “intermediate” Erechtheum, M. Picard believes that there was a kind of divination practised temporarily in the archaic temple, which must have disappeared later, about the time of the Persian Wars, when Athens had established connections with the Delphic oracle. Herodotus (V. 72) mentions the attempted visit of Cleomenes of Sparta, in 507, to the “adyton of the goddess” and his repulse by the priestess. M. Picard considers this a reference to an early oracle and believes that its trace in the “classic” temple was the western part which, in the old temple, had a sacred doorway (suppressed later) leading into the *cella* of Athena Polias. Προεπίσιν, Picard is confident, here means “consult,” not “address” or “pray to,” comparing H. Estienne in his *Thesaurus*, which gives *consulturus*. Again, in V. 90, Herodotus mentions a collection of oracular responses gathered as a booty by Cleomenes during his short stay in the fortress at Athens. M. Picard quotes the passage, believing that these responses were brought from the Acropolis itself. The story represented on the eastern frieze of the north porch of the Erechtheum was the transfer of Ion to Delphi, a symbol, thinks Picard, of the silencing, in the “classic” building of the Athena oracle in the older one, and of the passing of the power to Apollo. Athena Skiras is another representation of the goddess in connection with divination, this time by means of dice or knuckle bones (astragaloi). There remained in classic days the reverence for the old earth fissure, connected, it is true, now with the trident of Poseidon. This was under the Prostomaion, but it may have been earlier a *chasma* of the same type as that at Delphi and elsewhere.

#### ARCHITECTURE

**An Unusual Piece of Architectural Ornament.**—The narrow projecting fillet at the top of the inner architrave of the colonnade of the temple at Sunium is ornamented on the south side with two rows of a two-strand braid in very low relief, which was discovered a few years ago by W. ZSCHIEZSCHMANN and is published by him in *Arch. Anz.* 1929, pt. 3/4 (cols. 221–225; 3 figs.). The fillet continues around the west end, while the east end has a moulded profile in this place. Such a braided border is not uncommon in ceramic art and especially on terracotta pediments and gutter faces, but is not elsewhere known on architraves. The corresponding fillet on the outside architrave of the Parthenon has a meander pattern, in keeping with the rectangular lines of the architecture, but no ornament is known to have existed on the inner architrave. The original investigation at Sunium did not go so far as to find traces of the color, which undoubtedly emphasized the design, nor to ascertain the facts about the corresponding stones from the north architrave.

#### SCULPTURE

**Some Technical Methods of Archaic Sculpture.**—A study of the surface and details of the works of archaic Greek sculptors has led S. CASSON to certain conclusions as to the tools and processes used in making them, which he contributes to *J.H.S.* 1 (1930), pt. ii (pp. 313–326; 7 figs.). Without discussing the date of the introduction of the running drill in the fifth century, he finds that the simple drill, known as a carpenter's tool from the time of Homer, was never used by sculptors on poros or any soft stone, but came into use for working marble about 525 B.C., and before 510 it was used very sparingly and only for undercutting

drapery. The Antenor koré, to be dated soon after 510, is the first of the Acropolis maidens, in which it is used freely and of a large size. In Attic poros sculpture and the contemporary Cretan limestone frieze of Prusias, only the flat chisel and a knife were used, while the small reliefs from the Sanctuary of Artemis Orthia at Sparta were carved with a knife only. A compass with a cutting edge on one leg was used to make half circles in the decorative parts of the Prinias frieze and elsewhere, but with the introduction of the harder Parian and Pentelic marbles, it was superseded by the ordinary two-pointed compass. The only evidence for a sculptor's use of the square is found in the "autographic" relief of Archedemus of Thera in the cave of Vari on Hymettus, where he shows himself at work, holding a square in one hand and a pointed trimming hammer in the other. The gouge is very seldom to be traced in archaic work. But the peculiarly fresh and clear finish of the surface of archaic sculpture was produced by abrasion with tools of stone, not of metal. This is clearly the case in the sculptures from Naxos in the Acropolis Museum and elsewhere. The great deposit of emery still existing on the island shows the origin of this technique. The prehistoric Cycladic idols of hard island marble were shaped and finished by a still harder stone, and whether or no by a continuous tradition, the island sculptors of historic times used the same process and for the same reason. A thin disc or half-moon-shaped rubbing tool used to cut between the toes has left its marks on some statue-bases in the Acropolis Museum, and it can be traced also between the flaps of the cuirass on the stele of Aristion and in the checker pattern on the end of a sash of a torso on the Acropolis. On the drapery and hair of Samian and Naxian statues the folds and lines are incised in the surface by a rubbing tool with a precision that is impossible in chisel-cut work, where the angle of pressure is oblique. A comparison with the chiselled finish of the archaic athlete bases from the Wall of Themistocles brings out the difference. Naxian emery both in solid form and as sand, to be used with water, is mentioned by Pliny, Suidas, and others in connection with sand and whetstone from Oaxus in Crete.

**Archaic Terracottas from Lato (Crete).**—In *B.C.H.* liii (1929), pp. 382-429 (pls. XXIV-XXX; 36 figs.), PIERRE DEMARGNE publishes the archaic terracottas from this site, now in the Candia Museum, most of which come from excavations made by Joseph Demargne in 1899 and 1900, and the rest from a supplementary campaign by Adolphe Reinach in 1910. None of them has been published before, nor their existence indicated in the reports of the excavations. In all, ninety-nine examples are listed, divided as follows: (I) Primitive figurines (nos. 1-16; 11-16 are of the "xoaniform" type); (II) Archaic figurines, subdivided as follows: (a) draped goddesses 17-29, (b) nude goddesses, 30-36, (c) seated goddesses, 37-40, (d) kneeling figure, 41, (e) heads, 42-56, (f) male statuettes, 57-75, (g) animals, 76-91; (III) plaques in relief, 92-99. These figurines date from the eighth to the end of the sixth century B.C., to which later epoch most of them belong. The cult which they represent is akin to that of Artemis Orthia at Sparta.

**Votive Plaques of the Archaic Period in Crete.**—In *B.C.H.* liv (1930), pp. 195-209 (pls. X, XI; 1 fig.), PIERRE DEMARGNE continues his study of these objects (cf. *B.C.H.* liii (1929), p. 417 f.). Two types are studied in these pages; the double goddess, and the sphinx and griffin. These plaques all date at the end of the seventh or beginning of the sixth century B.C. The first type represents two female figures exactly alike, probably one goddess represented twice. Similar plaques have been found in the sanctuary of Artemis Orthia at Sparta, in Boeotia, and at Delos, Samos, and Rhodes. The writer believes them to be the double Eileithyiai, originally one goddess, but later doubles, deities of fertility and

fecundity, whose origin was undoubtedly Cretan, but who spread all over the Greek world, and who may well have been the prototypes of Demeter and Kore. One symbolized human fecundity, the other that of animals. The second type (sphinxes and griffins) represent guardians of the sanctuary, and derive from Oriental sources, introduced, in all probability, through Rhodes or Cyprus.

**Artemisian Statues.**—In *L'Acropole*, v, 3/4 (July–December 1930), pp. 185–187, ALEX PHILADELPHUS discusses very briefly the two bronze statues, Zeus (or Poseidon?) and the boy “jockey” brought up from the sea off Cape Artemisium the preceding year. The particular value lies in the fine, full-page plates, one for each statue, that accompany the article.

**Astragalizontes, Isolated or Pediment Group?**—In *R. Ét. Gr.* xliii, 203 (October–December 1930), pp. 384–397 (9 figs.), W. DEONNA, under the above title, discusses the paper of Ch. Picard in *R. Ét. Gr.* xlii (1929), pp. 121 ff. (see *A.J.A.* xxxiv, p. 489). Dickens, says Deonna, had pointed out that the male figures, as having different dimensions, belonged to (“ex-voto”?) statues, separate from the Athena. Schrader, followed by Picard, argues for their unity, basing his belief on the archaic type of work (“reversed” male figures, etc.) with some reason as Deonna thinks, who compares the Aegina West Pediment and other works. Deonna would restore the hands of the male statues as at least nearly horizontal and not touching the ground at all, while the torso is much less inclined forward; his main point being the hang of the drapery. In spite of numerous vase paintings figuring warriors, like these two, throwing dice, Deonna rejects Picard’s view of an oracular use of the *astragaloi*. The young men represent an action, and an action to be viewed only from the front plane, an architectural one. After various considerations, Deonna states his belief that the male figures are charioteers, kneeling either before their teams or behind their chariots, at a distance from the central figure of Athena. General proportions would suggest a pediment of approximately 10 to 11 metres and a height of the building of from 6 to 7 metres. The author admits that his hypothesis supposes a new, hitherto unknown, pre-Persian temple on the Acropolis.

**Concerning an Interpretation of Attic Grave Stelae.**—In *B.C.H.* liv (1930), pp. 210–227 (3 figs.), P. DEVAMBEZ takes up the theory of Couchoud (*Rev. Arch.* xviii (1923), pp. 99–118, 233–260) that the figures on grave reliefs are intended to represent, not human beings, but divinities. This theory, although in many ways attractive, has many objections and must be rejected. The writer believes that the sculptors of the stelae sought to portray the dead in Hades, according to the memory which their survivors had of them, practicing their favorite pursuits in life. The accessory figures need not necessarily be the dead, but are bidding a temporary farewell to the departed, whom they will later rejoin.

**Fragment of an Attic Grave Relief.**—The lower portion of one of the tall, narrow early Attic grave reliefs, now in the Ny-Carlsberg Museum in Copenhagen, is published and discussed by F. POULSEN in *Jb. Arch. I.* xlv (1929), pt. 3/4 (pp. 137–140; pl.; fig.). It shows in profile to the left a warrior armed with a spear and crouching behind his round shield, while the feet of a companion standing at his right side are visible. The crouching figure, sitting on one leg, which is drawn back, while the other leg has the knee raised, is seen in the Aeginetan marbles, and belongs to the time when Athenian warriors first encountered the Persians, for in their ordinary standing position the comparatively small round shield did not give sufficient protection from these arrow-shooting armies, and until their shields were provided with pendent flaps of heavy cords, it was necessary for two men to fight from behind a pair of shields held one above the other. This stage in the evolution of battle technique would be found at the time of

the battle of Marathon, a date with which the exquisite archaic finish of this work corresponds.

**Fragment of a Fifth-Century Marble Stele.**—In *Metz. Mus. Studies*, iii, 2 (June 1931), pp. 147-157 (14 figs.), GISELA M. A. RICHTER presents a thorough restudy of a broken portion of an Athenian stele now the property of the Metropolitan Museum. Analysis of the brief, incomplete inscription, the style of the head, which is all that remains of the girl's figure, and a comparison with the stele of Phrasikleia in the National Museum at Athens, lead to the conclusion that the monument was set up by an Athenian man of considerable wealth probably about the end of the fifth century B.C. The head is notable for its beauty. It is also one of the few known life-size heads of its period.

**The Herms in the Gymnasium of Delos.**—There were, according to the Inventory of Kallistratos, forty-one marble herms in the Gymnasium at Delos in 156-5 B.C. Between that time and the abandonment of the building, ca. 90 B.C., many more may have been added. Up to the campaign of 1911, only one herm was known on the island, and that without a head. Five heads from herms, found in the gymnasium, are here published, the earliest of which is dated at the end of the third century, the second in the first half of the second century, the third about contemporaneous with the Inventory of Kallistratos, the fourth and fifth posterior to that list. These herms, executed by artisans of an inferior order, are to be considered, not as images of gods, but of young athletes, who, for some reason, were deemed worthy to have their portraits set up in the gymnasium. (CASIMIR MICHALOWSKI, in *B.C.H.* liv (1930), pp. 131-146; pls. IV-VII; 5 figs.)

**How Was the Serpent-Pillar in Constantinople Made?**—In *Jb. Arch.* I, xliv (1929), pt. 1/2, pp. 1-36 (15 figs.), K. KLUGE reviews the various processes used in working bronze, from the earliest times, and studies especially the extraordinary achievement of the Greeks in casting very large objects of bronze in a single piece. The earliest uses of bronze seem to have been the solid casting of comparatively small implements in moulds of stone or clay, and the sheathing of wooden objects with thin sheets of metal hammered to fit them. Later the hammered work was made independent of a wooden core, and pieces were rivetted together to make larger objects, while still later hard soldering took the place of rivets. The colossal bronze statues of Egypt were composed of numerous small pieces of cast and hammered bronze rivetted together. The casting of hollow objects by the *cire perdue* process, still commonly employed (in which the model is finished with a coating of wax of the desired thickness of the bronze over a rougher core of clay, then the mould fitted to the waxen surface and the molten bronze run into the space left when the wax is melted and run out), seems to have been used very early by African negroes, as well as by Egyptian, Greek, and all subsequent artists in bronze, though any casting, to be a real work of sculpture, must be finished with a chisel. The Egyptians, because they melted the metal in underground furnaces from which it was conveyed by hand to moulds above ground, were confined to casting comparatively small or medium-sized objects; but the Greeks, who put the mould into the ground and the furnace above so that the molten metal could flow into it by its own weight, could cast much larger objects. Even so, the casting of life-size or colossal statues was a very difficult process requiring extreme skill and care. There is a class of archaic Greek bronzes, not wax-cast, which seem to have been made from wooden models, and the famous invention of the Samian artists, Theodorus and Rhoeus, in the sixth century, may have been the art of making moulds from wooden models in several pieces. The charioteer of Delphi was cast after a wooden model, in two parts joined under the girdle with a groove-and-tongue joint. The lower part, in which the feet are

in one piece with the garment, was cast upside-down, like a bell, and the edge of the garment separated from the ankles by cutting out the metal by hand. The hair, arms, head-band, and other extraneous parts were cast separately and soldered on. A wooden model divided into parts seems the only possible means of casting in one piece such a colossal work as the Serpent Column of the Hippodrome at Istanbul. The original base is still extant at Delphi, showing the marks of the missing tails of the serpents. When complete, both above and below, this monument must have contained four or five tons of metal, and no seam is visible, either inside or outside, a truly astonishing achievement. In Roman times all the different processes were current at the same time, but the colossal statues made toward the end of the epoch were composed of many small pieces, like those of Egypt, and this is still customary.

**Origin of the Gorgon.**—In *Arch. Eph.* 1927–1928 (issued 1930), pp. 128–176, CONSTANTINE GEORGIANNES discusses the origin of the Gorgon. An earlier publication of the author contended that the head of the Gorgon was derived from an apotropaic lion's head. Paul Wolters accepted this theory in part, but held that the Gorgon-Medousa was a deity of higher rank, related to the mother goddess, before the apotropaic head was added to it. The author finds that this theory runs counter to the normal course of the development of religious ideas, according to which evil demons are invented before good gods. Literary evidence, moreover, confirms the author's view that the Gorgon is older than Medousa; the latter is called a mortal by Hesiod; she is associated with Perseus; she is buried like a hero at Argos. In early art the mother goddess of fertility, an agricultural type, is to be distinguished from an earlier hunting type who has dominion over animals. The Gorgon differs from both in that she is ugly and apotropaic, and also in that she is represented in action as running. This attitude of running with one knee bent and one arm raised, though perhaps invented in Anatolia, was early Hellenized, was entirely expressive of the Greek mind, and continued with some modifications to symbolize active combat with evil down to the Nikés of classical times. The author concludes with an examination of those objects which have been thought to picture the Gorgon-Medousa as a kindly deity and finds no evidence to contradict his earlier view that she was at the start an ugly, apotropaic demon.

#### VASES AND PAINTING

**On the Meaning of the Parodies of Heroic Themes in the Vase Paintings of the Theban Cabirion.**—In *R. Arch.* xxxii (1930), 65–88 (7 figs.), E. LAPALUS discusses seven scenes on vases from the Cabirion at Thebes, most of which relate to Ulysses, Cadmus, and Bellerophon, whom Lapalus looks upon as heroes or saints of the Cabiric religion. The caricatures on the vases do not represent actual scenes from the *δράματα* of the local cult, but rather comic improvisations of the *ἰθιδονταί*, the comic actors of Thebes, who chose subjects from heroic legends of religious symbolism and who would have no hesitation about dedicating their burlesque offerings to Cabiroi and his son.

**An Askos in the Chanenko Collection in Kiev.**—A Samian askos of the low, duck-shaped type, formerly in St. Petersburg, is published, with some other examples in Russia, by O. WALDHÄUER in *Arch. Anz.* 1929, pt. 3/4 (cols. 235–266; 27 figs.), and made the basis of a study of the peculiar technique seen in this example and of the development of the vase form known as *askoi* from late Mycenaean times down, especially in Samos, whence it was carried to Athens by Amasis and to Lower Italy. The older forms, imitated from wine-skins, were long and pointed at one end and set on three feet. A sack-shaped vessel followed,



still showing its origin by a seam-ridge along the top and by its bulging sides. The duck-shaped vessel is allied to the stirrup jug. The Chanenko vase has painted on the top on each side of the handle a rapidly moving male figure wearing a loin-cloth, in the knee-running position, with head turned back and elbows lifted high. A cantharus on the ground suggests a comus scene, but a round black object in the air behind the figure may indicate a game of ball. The picture belongs to the period when the Greek tendency to naturalism was influenced by the Egyptian fondness for abstract beauty of line.

**The Development of Attic Art from 540 to 490 B.C.**—The half-century preceding the Battle of Marathon saw a development of art in Attica which corresponds closely with the expansion of outlook and consciousness in the citizens during this period. It can be traced in the treatment of the human figure, especially in the successive styles of vase-painting of figures in a limited field. On the Dipylon funeral vases of the eighth century the human figures, with their triangular bodies, swollen thighs, and conventional nudity, are scarcely more than symbols, and the various groups of the funeral procession are put together like building blocks. A century later, in a Peloponnesian representation of Helen rescued from Theseus and Peirithoüs by Castor and Polydeuces, in spite of crude shapes and relative disproportions, the figures are instinct with feeling and action. The François vase of Clitias, dated shortly before 540, has clearly defined proportions and outlines, dignified movement, and great richness of color and decoration. This advance has its highest point in the work of Amasis. On an amphora of his in Berlin dated about 540, the scenes are skilfully unified in interest about a central axis and fitted to a well-defined field between borders—a feature developed especially in the Peloponnese in metopes and metal and ivory work. The satyrs and maenads dancing around Dionysus are living forms, dramatic in movement, monumental, and plastic, the whole group strictly symmetrical. The next step, which makes the picture more independent of the vase, more freely composed, more subtly balanced, is exemplified by Exekias, a slightly younger contemporary of Amasis, in the famous scene of Achilles and Ajax playing draughts, in which a traditional subject of mythology is made a genre scene. The same artist's picture of Dionysus riding in a boat with vine-wreathed mast amid a school of leaping dolphins is myth turned into poetry. Between 535 and 530, largely under the influence of contemporary sculpture, came the revolutionary introduction of the red-figured technique, which throws the figures into such striking relief and permits such delicate indication of modelling by fine brush strokes. The most interesting master of this stage, in 520 to 510, is Epictetus, who carried to perfection the antithesis between the contour of the figures and that of the enclosing field. Euthymides next developed the plastic character of the figures by adding depth to the field and a third dimension to the movements and attitudes, a tendency which was refined by Euphronius and given new life by the Cleophrades painter. The latter transferred the interest from contours to attitudes, vividly expressing the characters and feelings of the persons represented. In the larger and not solely Athenian field of plastic composition, votive reliefs, metopes and pediments, and even sculpture in the round, the same development might be traced in successive steps from the flat, frontal, restricted contour stage to that in which the figures are fully modelled, free in their movements, and independent of a background. The reliefs on the two archaic athlete bases from the Dipylon gate are at least a decade apart in this respect, for the change was especially rapid in the closing years of the sixth century. The artistic development is paralleled throughout by the psychological growth of the people, who in the course of this century came to distinguish philosophy from religion, history from myth, medicine from magic,



and art from the exclusive service of the gods. (B. SCHWEITZER, *Jb. Arch. I.* xlv (1929), pt. 1/2, pp. 104-131 (11 figs.).)

**Archaic Athenian Painting: Epictetus.**—In *Jb. Arch. I.* xlv (1929), pt. 3 4 (pp. 141-197; 42 figs.), W. KRAIKER presents a study of the long career in the latter half of the sixth century B.C. of the vase-painter Epictetus, describing the successive stages of his style, its beginning, growth, height, and gradual decline, and relates them to the work of his predecessors and contemporaries, Clitias, Amasis, Andocides, Exekias, Euphronius, and others. Epictetus painted almost exclusively cylices and plates, and his originality and skill in design are especially seen in the round pictures in the middle of such vessels. He was apparently the first artist to use the red-figure technique on cylices, and perhaps for that reason he signed even his early works. These were eye-cylices by the potter Hischylus, in red-figure, but with the round picture in black-figure. Later his work was entirely red-figure. He used the curious spelling *Ἐρασφον*, but later corrected it to *Ἐραφσον*. The potters with whom he worked, beside Hischylus, were Nicos-thenes and Pamphaeus (spelled *Παμάρσιος*), and in one instance Python.

**The Fringe of the Bowl of Thyrsis.**—In *Ann. Arch. Anth.* xviii, 1/2 (March 1931), pp. 19-28 (pls.), A. Y. CAMPBELL discusses Theocritus, *Idylls*, I, 27-31, and by comparison with ivy decoration on two vases from Bagni di Vicarello and from Hildersheim emends lines 30-31:

κισσός ἐλιχρύτῳ κεκορυμένος · ἃ δὲ κατ' αὐτόν  
καρπῷ ἐλιξ εἰλεῖται ἀγαλλομένα κροκόεντι.

to read:

κισσός ἐλιξ χρυσῷ κεκορυμένος · ἃ δὲ κατ' ὧτων  
καρπῷ ἐλιξ εἰλεῖται ἀγαλλομένα κροκόεντι.

**Meleager Vase.**—In *Arch. Eph.* 1927-1928 (issued 1930), pp. 206-209, J. KAKRIDES contributes a note on a vase in the Naples Museum on which is represented the death of Meleager. Peleus and Theseus are depicted near Oineus in the lower register of the scene because they, like Oineus, are types of tragically bereaved parents.

**Red-Figured Krater.**—In *Eph. Arch.* 1927-1928 (issued 1930), pp. 177-181, DR. MICHAEL DEFFNER discusses the scenes on a late red-figured krater in Vienna. On the obverse the central figure is wrongly restored as a woman. In reality it is a male figure and represents Theseus, and a figure on the left approached by Eros is Antiope. On the obverse, the scene is closely analogous to that on a vase published by the author in *Eph. Arch.* 1924-1925, and represents not the betrothal of Theseus and Antiope, but the heroes of the Calydonian boar-hunt.

**Vase-Paintings and Athenian Private Life.**—In *L'Acropole*, v, 3/4 (July-December 1930), pp. 145-165 (12 figs. in 4 pls.), H. PHILIPPART gives a useful summary of scenes of private life depicted on vases.

## INSCRIPTIONS

**The Financial Decrees of Kallias.**—An elaborate discussion of the much-discussed double-faced inscription concerning the accounts of monies belonging to Athena and the Other Gods (*J.G. I*<sup>2</sup>, 91, 92) is published by H. T. WADE-GERY with photographs and a proposed restoration of face T. He rejects all dates but the years 434-3 and 422-1, decidedly favoring the later date. (*J.H.S.* li (1931), pt. i, pp. 57-85; 3 pls.)

**Honorary Decree of Halae Araphenides.**—In *Arch. Eph.* 1925-1926 (issued 1930), pp. 168-177, N. CH. KOTZIAS discusses an honorary decree of Halae Araphenides, which was found in 1926 in the remains of a Roman house not far from Sparta. Of the eighteen lines which it is estimated that the inscription

originally contained, lines 5-7 and 13-17 can be restored. The decree is dated to the middle of the fourth century by a reference to the appointment of a demarch Archias. The commentary on the inscription includes a discussion of the *στῆβαι*: *Θαλλοῦ*, the location of Halae Araphenides, and the organization of the government of Attic demes.

**Supplementary Study of Locrian Law.**—In *Arch. Eph.* 1927-1928 (issued 1930), pp. 181-185, A. CH. CHATZES publishes further observations on the Locrian law recorded on a bronze tablet in the Museum of Thermon, which was published in *Arch. Eph.* 1894, pp. 119 ff., and republished with emendations by Willamowitz von Moellendorff. To these observations A. D. KERAMOPOULLOS adds a note on pp. 209-210.

**Tribute List of I.G. I, 2 218.**—In *Arch. Eph.* 1925-1926 (issued 1930), pp. 46-66, B. D. MERITT and A. B. WEST discuss in detail the problems connected with the tribute list, *I.G. I, 2 218*, for which they give both a photographic reproduction and a transcription.

**A Naval Battle Off Lampsacus.**—An inscription recently found in Lampsacus and published in *B.C.H.* in 1928, mentions citizens "captured in the naval battle" and ransomed and restored to their home by a Thasian. As the character of the letters suggests a date about 300 B.C., a time when Lampsacus was in no position to maintain a fleet of its own, the battle must have been some unrecorded engagement in the wars of the Diadochi, presumably the war between Lysimachus and Demetrius, son of Antigonos, under one of whom the Lampsacenes were serving. It was most probably in 302, at the beginning of the campaign of that year in which Demetrius with his fleet forced the Hellespont and the Bosphorus and captured Lampsacus, after which he raided the Black Sea and sank a transport flotilla of Lysimachus. A battle off their own shores, in which their citizens were captured, would naturally be recorded by the Lampsacenes as "the naval battle." (*M. CARY. J.H.S.* I (1930), pt. ii, pp. 253-254)

**Relations of Aetolia and Boeotia, 301-278 B.C.**—In *B.C.H.* liv (1930), pp. 75-94, R. FLACELIÈRE published a fragment of an inscription found at Delphi in 1929, which certainly belongs with the stone published by Walek (*Rev. Philol.* xxxvii (1913), p. 212 f.), giving the treaty of alliance between the Aetolians and the Boeotians. Another fragment of the same document, identified by Rousset, is here included. The bulk of the article is a discussion of the date of the treaty. Walek had given 292; A. J. Reinach suggests 294; De Sanctis 281, and Beloch about 300. The author is inclined to support Beloch, and gives his reasons. The arguments of De Sanctis can easily be refuted, those of the others, while more plausible, are equally open to criticism. A date of 301-299, approximately that suggested by Beloch, is therefore arrived at. The article ends with an historical résumé of the relations between Aetolia and Boeotia at this period.

**The Lists of Amphictyons at Delphi.**—R. FLACELIÈRE brings together in chronological order the lists of Amphictyons at Delphi from 278-7 to 193-2 B.C. These inscriptions have all been previously published, but the author provides a brief commentary with each. Forty-six inscriptions can be dated; there are eight others (likewise previously published elsewhere) that cannot be dated. The article ends with a careful series of indices. (*B.C.H.* lii (1929), pp. 430-490)

**The Consul M. Fulvius and the Siege of Same.**—In a long and closely reasoned article (*B.C.H.* liv (1930), pp. 1-41), MAURICE HOLLEAUX discusses the theories of the late Karl Julius Beloch regarding the chronology of Rome during the years 190-188 B.C., rejecting them in favor of the traditional interpretation of the changes in the calendar known to have been made at the time. Beloch had based his theories on certain Delphian inscriptions as published by Pomtow; un-

fortunately for him, these publications were incomplete, as several fragments belonging to them were unknown to him and to Pomtow. These premises caused him to place the consulship of Fulvius, the Siege of Same, and the consequent acts of the Achaean League in the Peloponnesus too early. Holleaux assigns dates to these events more in agreement with the literary and epigraphical evidence.

**The Gymnasium of Delos and the Inventory of Kallistratos.**—In *B.C.H.* liv (1930), pp. 95–130 (pl. III; 2 figs.), JEAN AUDIAT publishes, with translation and commentary, an inscription found at Delos giving the inventory objects on view in the gymnasium in the year 156–55 B.C., the archonship of Kallistratos. This inventory makes it possible to identify as the gymnasium the very mediocre building uncovered in the campaign of 1911. Fragments of two other similar inventories, probably anterior to that of Kallistratos, are also published. The building is identified by the fact that the dedicatory inscriptions of the offerings have in many cases come down to us, found *in situ*. None of the bronze objects listed have been preserved. It is difficult to follow the route taken in the gymnasium by those who made the inventory, as it is impossible at present to be absolutely certain where the entrance was located, although the writer believes that it was very surely on the south side. Facing this entrance, on the other side of the peristyle, and opening on the north portico, is a large room with benches, identified by Vitruvius's description of a palaestra (a translation of which is given) as the *exedrion* or *ephebeum*. The existing peristyle is dated not far from the time of this inventory. The presence of bronze statues of Eros in the inventory is not surprising, and has many parallels. On the west portico is a large room, clearly the *ἀποσπύριον*, and there seems to have been a second room of this kind on the north portico as well. Following the list of the bronze objects is one of those in marble, which was evidently not so highly prized as bronze, as forty-one herms are lumped together in one item. This inscription is of extreme importance in the reconstruction of a gymnasium of the Hellenistic period.

**Kalydonian Inscription Relating to an Inheritance.**—In *B.C.H.* liv (1930), pp. 42–50 (pl. I), FREDERIK POULSEN publishes an inscribed bronze plaque, found in the sanctuary of Artemis Laphria, in the second campaign at Kalydon in the Spring of 1928. This plaque relates the decision of a contested inheritance. It has been published before, but without a commentary, which is here provided. Of interest is the appointment of judges from a city in Elis (Thraistos) to assure a fair and impartial decision, and the consecration of the tablet to Artemis, showing that the suit was between two Aetolian families.

#### COINS

**Solon's Monetary Reform.**—Why the farmers of Attica had got hopelessly into debt through no fault of their own, why Solon adopted the lighter Euboic standard in place of the Aeginetan for his new coinage (probably the first of Athenian mintage) to prevent the recurrence of this condition, why he was forced to get his bullion from Corinth because the Aeginetans, enemies of Athens, with their command of the sea, cut him off from the chief Aegean supply of silver in the island of Siphnos, why Pisistratus substituted the tetradrachm stater for Solon's didrachm when he developed the mines of Laurium, and why Croesus, with his bimetallic currency, had a double standard for his gold staters, is explained by J. G. MILNE in *J.H.S.* l (1930), pt. ii, pp. 179–185.

#### ITALY

**The Memory of Alexander the Great and the Romans.**—In *Mél. Arch. Hist.* xlvii (1930), 202–221 (4 figs.), ADRIEN BRUHL discusses the interest shown in

Alexander the Great by the Hellenistic kings and by the Romans, especially by Pompey, Crassus, Caesar, Augustus, Mark Antony, Caligula, Nero, Trajan, Commodus, Caracalla, and Julian. At Rome there were many representations of Alexander in art during the first century of the empire. His likeness appears in a private house at Pompeii. Although there were periods, as under the Flavians, when Alexander's prestige was diminished, in general it is found to have been a living and influential factor in the art and thought of the Romans.

**Romulus-Augustus.**—In *Mel. Arch. Hist.* xlvii (1930), 138-181 (6 figs.), JEAN GAGÉ discusses the connection between Romulus and Augustus. The name "Augustus" was given to Octavian to suggest that he was a second founder of the city and a second *augur*. The type of Romulus triumphing played an important part in the art of the Augustan age and was paired with the representation of the flight from Troy of Aeneas with his father and son. Romulus and Aeneas, both deified, served as precedents for the apotheosis of Julius and Augustus. In the article are important discussions of the decoration of the temple of Divus Augustus, of Augustus' preventing Licinius Crassus from placing the *spolia opima* in the temple of Jupiter Feretrius, of the importance of the augurate, and of the influence of the triumph on the religious policy of Augustus.

The investigation is excellent, but it is most regrettable that the author was apparently unfamiliar with the recent literature on the subject: K. Scott, "The Identification of Augustus with Romulus-Quirinus," *T.A.P.A.* lvi (1925), 82-105; G. Hirst, "The Significance of *Augustior* as applied to Hercules and to Romulus," *A.J.P.* xlvii (1926), 347-357; F. Müller, "Augustus," *Mededelingen der koninklijke Akademie van Wetenschappen, Afdeling Letterkunde*, Deel 63, Serie A, Nr. 11 (1927), 275-347, and the important review of this study by A. VON PREMERSTEIN in *Philologische Wochenschrift*, 13. Juli (1929), 845 ff.

**The Victoria Augusti and the Auspices of Tiberius.**—In *R. Arch.* xxxii (1930), 1-35 (pl. III; 4 figs.), JEAN GAGÉ suggests a new interpretation of the scenes depicted on the so-called sword of Tiberius in the British Museum and of the Grand Cameo of France. He believes that both were intended to impress upon the army and the people of Rome the fact that the source of victory was the divine *Victoria Augusti* which was transmitted to the actual commander, Germanicus, through the augural power of Tiberius, the *imperator* who held the *maius imperium*. The same military and political lesson is also taught by the Cameo of Vienna, where Tiberius is represented as the *dux* and Augustus as the *imperator* through whose auspices Tiberius has been victorious; here the *Victoria Augusti* is not derived from the victorious power of Divus Iulius but from the influence of Capricorn, the sign of the zodiac under which the birth or conception of Augustus occurred. The *Victoria Augusti*, or divine power of the first Augustus, remains from Tiberius to Nero a force invoked by his descendants and considered by them as the ultimate source of their victories. As *imperatores* they transmitted the *Victoria Augusti* through their auspices, and to them belonged the triumph.

#### SCULPTURE

**Samnite Warriors and Gladiators.**—In *R. Arch.* xxxii (1930), 235-279 (41 figs.), PAUL COISSIN discusses two Roman lamps in the Musée Borl y at Marseilles which represent gladiators, and suggests that the manufacturers of lamps in the first century B.C. used as models for the figures of gladiators the representations of Samnite warriors from Campanian works of the third century depicting scenes from the Samnite wars. The study of the equipment of Samnite warriors and gladiators permits a new interpretation of various paintings and reliefs and a description of Italic equipment for warfare and of the equipment of a class of

gladiators. Couissin also suggests the correction of a statement in Livy, and possible prototypes of motifs of the Roman triumph.

#### VASES AND PAINTING

**Boreas and Orithyia on an Apulian Vase.**—A large volute crater in remarkably good preservation, which has apparently been in private possession for more than a century, has been presented to the British Museum and is published by H. B. WALTERS in *J.H.S.* li (1931), pt. i (pp. 86-90; pl.; 2 figs.). It has elaborate scroll handles and palmette designs below them, an unimportant though well-executed "conversation-piece" of three figures on the reverse, and on the front, the Rape of Orithyia by Boreas, in the somewhat unusual setting of a temple with altar. The god is nude, with wide-spreading wings and disheveled hair. He seizes the maiden as she flees toward the altar, while four more or less interested spectators look on. As one version of the story, given by an obscure commentator on the *Odyssey*, says that Orithyia was the daughter of Erechtheus and the keeper of his shrine on the Acropolis of Athens, this may be assumed to be the place represented. A temple key lying on the ground has perhaps been dropped by the frightened girl. The vase belongs to the finer class of large volute craters made in Apulia in the latter half of the fourth century B.C., midway between the cruder early ware and the later degraded types.

**The Technique of Etruscan Wall-Painting.**—Since Greek paintings on a large scale before the fourth century have all perished, while a great many large Etruscan paintings from the sixth century to Hellenistic times have survived in tombs, this phase of Etruscan art is of great interest both for its own sake and for what light it may shed on Greek monumental painting. With this in mind, JAN DE WIT has made a special study and taken photographs of a series of tombs, chiefly in Tarquinia, ranging from the Tomba dei Tori (sixth century) to the Tomba del Oro (end of fourth), giving special attention to the preliminary sketches which are found in almost all the paintings and to their relation to the finished work. The sketch is not so much an outline as a rough blocking out of the positions and attitudes of the figures and accessories. It consists usually of lines scratched with a pointed stick either directly on the surface of the rock or in a thin coating of stucco, but was occasionally drawn in black paint with a fine-pointed brush. In the Tomba del Barone this last method is combined with an under-painting in pale gray which in some places is not covered and with similar fine black lines marking divisions on the painted surface. Frequently the artist experimented with his line by making two or more, in one case as many as ten, hasty strokes, before his eye was satisfied, and even then he seldom followed his sketch closely, but varied the position of an arm or leg or painted outside or inside the lines of the sketch. In the earlier work the human figures seem often to be what might be called "memory pictures" rather than "sight pictures," the parts being visualized separately and not as an organic whole. The very common filling of vacant spaces with trees and plants shows a feeling for Nature that is Italian-Etruscan, even Ionic-Oriental, rather than Greek, though it developed under Greek influence into a conventional use of trees as a decorative or tectonic feature to separate the figures or groups of a frieze. In the Tomba del Letto Funebre, slender columns take the place of these formal trees, and after the fourth century they disappear altogether. The scenes depicted are often derived from the sphere of Greek vase-painting and allied arts, which in their turn have a relation to the missing monumental painting of Greece; but the costumes, gestures, figures, features and facial expressions, even the ornamental elements, are essentially Etruscan. In pre-Hellenistic times at least, the Etruscan tomb painter was an independent artist, not a copyist, and his art had

a native development parallel but not identical with that of Greece. (*Jb. Arch. I.* xliv (1929), pt. 1/2, pp. 31-84 (35 figs.))

### COINS

**Coinage of Metapontum.**—In *Num. Notes*, 47, S. P. NOE has continued his study of the coinage of Metapontum, thus bringing down the corpus of coins to about 360 B.C., and postponing the publication of the remaining to another volume.

**C. Sosius.**—In *Washington University Studies*, New Series, Language and Literature, No. 3 (1930), F. W. SHIPLEY gives a study of the life and activities of Gaius Sosius, a vir triumphalis, who flourished between 44 B.C. and A.D. 14. The discussion concerns his coins, his triumph, and his temple of Apollo, and fills out our knowledge of the Second Triumvirate.

**"Restoration Coins."**—In *Washington University Studies*, New Series, Language and Literature, No. 3 (1930), T. S. DUNCAN has summed up the current knowledge of the so-called "restoration coins," and put it into convenient form.

### BULGARIA

**Dumopireti.**—The otherwise unknown name of the *dumopireti* (or *-tae*), which occurs in the dative only, on a dedicatory relief of the Mother of the Gods and the Great God, found at the site of Novae in Moesia Inferior, is derived by L. DEUBNER from Greek δούμος, a band or company (not in the dictionaries, but found once in the Palatine Anthology and three times in Lydian and Thracian inscriptions) and πύραθοι, the priests of the Persian fire-worship, which had early penetrated through Asia Minor into Thrace. The calathus of Serapis worn by the god was conferred on him by Septimius Severus. In the inscription, the *dumopireti* are associated with the *dendrofori* as attendants of the divinities. (L. DEUBNER, *Jb. Arch. I.* xliv (1929), pt. 1/2, pp. 131-136; fig.)

**Roman Colonial Coins.**—In *Rév. de Num.* xxxvi (1931), pp. 85 ff., N. MOUCHMOFF discusses a portion of a hoard of Roman coins found in 1918. The coins are from six cities in the ancient provinces of Thrace and Moesia Inferior, and date from the time of Caracalla to that of Philip. Sixty-four coins are described. Several new reverse forms are noted.

### FRANCE

**Narbonensian Coinage.**—In *Num. Notes*, 44, GEORGE F. HILL has made a study of the difficult coinage of the district of Narbonensis, north of the Pyrenées, on which the inscriptions are written in the early Iberian language.

### BELGIUM

**The Bas-Relief No. 26 of the Museum of Mariemont.**—In *R. Arch.* xxxii (1930), 217-222 (1 fig.), HENRI LÉVY-BRUHL discusses a bas-relief at the château of Mariemont in Belgium which represents a scene of manumission. After rejecting the interpretations of the editors of the catalogue of Mariemont and of M. Ed. Cuq, Lévy-Bruhl explains the four figures, which he believes were the only ones that appeared in the scene: A licitor is represented as striking with his rod a slave who kneels before his master; the master is shaking hands with a slave who carries a whip and is evidently a coachman. For the significance of the hand-shaking three hypotheses are suggested: the act may indicate a gesture d'*appréhension*, a gesture prefatory to the *vertigo*, or a simple *dextrarum iunctio*.



## GREAT BRITAIN

**Dug-Out Boats from Wales.**—In *Ant. J.* xi, 2 (April 1931), pp. 136-144 (5 figs.), W. F. GRIMES discusses two boats from Wales. One was recovered during the dry period of August 1929 at Llandrindod Wells, and is punt-like, with straight sides, 15 ft. 8 in. long. The date of the boat is at present unascertainable; it has been called Roman, but merely because of its nearness to a Roman fort. The second boat has been known at least since 1866. It has much the same shape as the Llandrindod canoe, measures 9 ft. 9 in. in its present, somewhat abbreviated, length. Typological determination would place this boat at a late date; there are no associated objects that help in the dating.

**Roman Nail-Cleaner Showing the Sacred Tree Motive.**—In *Ant. J.* xi, 2 (April 1931), pp. 123-238 (pl.; 2 figs.), A. B. TONNOCHY and C. F. C. HAWKES discuss an interesting engraved bronze Roman nail-cleaner which has on its flat side a representation of the sacred tree of the early Christianity, a decoration that is believed to have been subsequently added to the pagan toilet object. The nail-cleaner was found in Essex, in a spot where its association with other Roman objects can be readily understood. If it has Christian significance, it is rare among Roman articles from Britain. Exact dating is not possible, but it is reasonable to associate the instrument with the fifth century.

## AFRICA

**African Animals on Coins.**—In *R. Suisse Num.* xxv (1930), pp. 5 ff., Oscar BERNHARD discusses, with illustrations, representations of African animals on ancient coins. In such figures the coins of the city of Alexandria are especially rich, because of the importance of animals in Egyptian cults. Beasts used in the circus are found extensively on Roman coins, as are also personifications of the subdued provinces. These pictures provide us with a fairly accurate idea of the forms of ancient animals.

## EARLY CHRISTIAN, BYZANTINE AND MEDIAEVAL

## GENERAL AND MISCELLANEOUS

**Byzantine Ceramics.**—In *Faenza*, xix (1931), pp. 5-13 (4 pls.), D. TALBOT RICE gives a brief sketch of Byzantine ceramic art, discussing the various types of decorated pottery produced by Byzantine manufactories, the influence of other countries upon it, and the extent of its usage in Byzantine times. It forms a much more important subject in the history of art than Byzantine scholars have recognized, comparable in no small degree to the ceramics of Persia and Italy. Examples have been found that may be dated from the eighth century on through the Byzantine period, and they include types that have been used by the well-to-do middle class and even by the court.

**Byzantine Coinage.**—In *R. Num.* xxxiii (1930), pp. 159 ff., S. MIRONE shows how the art of the coins of the Byzantine Empire, first based on Hellenistic types, suffered a distinct change after the iconoclastic Emperor Leo III, the Isaurian, and took for its models Asiatic types, the coins of the Parthian and late Bactrian kings, and particularly the coins of the Indian kings Huvishka and Kanishka. These Asiatic coins, themselves sprung from Hellenistic models, had long taken on a distinct Oriental cast, which was imitated by the Byzantines.

**Byzantine Weights.**—In *R. Num.* xxxiv (1931), pp. 9 ff., A. DIEUDONNÉ discusses the interesting collection of standard weights of the Byzantine Empire which are now in the possession of the Cabinet des Médailles.



**The Nature of Byzantine Art.**—In *Munch. Jb.* viii (1931), pp. 99-132 (20 figs.), S. GUYER takes up the problem of Byzantine art in a manner related to that of Wölfflin in the study of the Renaissance and Baroque. An examination is made of the following problems: the relationship of interior and exterior construction; the treatment of the wall surfaces; the architectonic decoration, especially the acanthus ornament; the architectural types. The period under consideration is the fifth and sixth centuries. As to the much discussed problem of the influences of Rome and the Orient in the formation of Byzantine style, the author believes that neither of these sources was so strong a determining factor as has been contended; he believes that Byzantium herself was the principal determinant of the style.

#### ARABIA

**Metalwork of the Rasūlid Sultans of Yemen.**—In *Metr. Mus. Studies* iii, 2 (June 1931), pp. 229-237 (5 figs.), M. S. DIMAND discusses certain hitherto unpublished metalwork with names of Rasūlid sultans reigning from 1229-1454 at Yemen, in southwestern Arabia. The objects are important in connection with the metalwork of Egypt and of Syria. The pieces are described as: a thirteenth-century, apparently Egypto-Arabic brazier, of brass with silver inlay; two fourteenth-century, Egypto-Arabic trays, one of brass formerly with silver inlay and the other still showing the inlay; a basin of generous depth, probably Egypto-Arabic of the fourteenth century, of brass with silver inlay; another and more shallow bowl of the same period and materials.

#### TURKEY

**Hagia Sophia and the Great Imperial Mosques.**—In *Art Bulletin* xii (1930), pp. 320-345 (25 figs.), M. A. CHARLES makes a comparison of the great imperial mosques with their inspiration in central dome construction, Hagia Sophia. These examples include six in Constantinople besides one, Selimiyyeh, in Adrianople.

**Selimiyyeh in Konya.**—In *Art Bulletin* xii (1930), pp. 310-319 (9 figs.), R. M. RIEFSTAHL supplements Mehmet Aga-Oglu's description of the Old Fatih in Constantinople with the discovery that the mosque of Sultan Selim in Konya is a replica of the Old Fatih.

#### GREECE

**Early Christian Basilicas and Other Remains.**—The entire volume of *Arch. Eph.* for 1929 (issued 1931) is written by G. A. SOTERIOS and is concerned with the early Christian art and archaeology of Greece. Two articles make up the volume. The former, pp. 1-158, is concerned with the Christian city of Thebes in Thessaly, located near the classical city of the same name, and identified by inscriptions. Two basilicas from this town are studied in detail and excellently illustrated with plans, photographs, and restorations. The ambon of the first basilica, which dates from the end of the fifth or the beginning of the sixth century, is of unusual shape and richly decorated. The apse of the second basilica, of slightly later date, was exceptionally well preserved and made possible the restoration of the earlier basilica with its altar table, its ciborium, the throne for the prelates, etc. In addition to the basilicas were uncovered baptisteria, private houses, a bath, a richly decorated gateway, and tombs. The sculptured ornament of all these buildings is carefully studied and abundantly reproduced.

The second article, pp. 161-248, first briefly describes the remains of forty-two early basilicas in Greece, dividing them according to type, and then recapitulates what is known of early Greek basilicas, their architectural divisions, their altars, and their ambons.

**Frankish and Venetian Coins.**—In *Num. Notes*, 43, D. H. Cox describes a hoard of 125 Frankish and Venetian coins, found in 1927 at Caparelli, near Thebes, in Boeotia. The pieces date from 1278 to 1361, and the burial is believed to have occurred at about the latter date.

### ITALY

**The Church of S. Saba.**—In *Rivista di Arch. Cristiana*, 1929, pp. 313-357, J. LESTOCQUOY studies some inscriptions and the construction details of the church of S. Saba. The conclusion is that the church was erected ca. 900, the campanile in the tenth-eleventh century, and that some fragments of sculpture found in the excavations belong to the ninth-tenth century.

**The Monastery of S. Vittore delle Chiuse.**—In *Rassegna marchigiana*, 1930, pp. 335-353, R. SASSI publishes a document of 1011 in which the church of S. Vittore is mentioned, thus proving that its erection antedates this year. Stylistic considerations place the building in the last years of the tenth century.

**The Origin of S. Ansuino di Avacelli.**—In *Rassegna marchigiana*, 1930, pp. 362-363, R. SASSI proves by documents the eleventh-century origin of S. Ansuino di Avacelli, already advanced hypothetically by E. CARDELLI (*ibid.*, p. 297).

**The Sculptor Niccolò.**—In *Art Bulletin*, xii (1930), pp. 374-420 (67 figs.), D. M. ROBB traces the career of the North Italian sculptor Niccolò, active from about 1120 to 1150. He and Wiligelmus of Modena are distinguished from their contemporaries by the fact that they left signed works.

**The Basilica of S. Giusta di Bazzano.**—In *Boll. d'arte del Min. dell' Ed. Naz.* 1930, pp. 97-119, R. BIOLCHI discusses the chronology of the church of Bazzano (Abruzzo) and its restorations. The façade, later than the interior, has a portal dated 1230. A sculptured ambon, newly come to light, is one of the most notable features of the interior. There are also some thirteenth-century frescoes.

**Migliore di Jacopo.**—In *Burl. Mag.* 1930, pp. 223-236, G. M. RICHTER attempts to reconstruct the personality of Migliore di Jacopo, by whom there is a signed and dated (1271) painting in the picture gallery at Parma. This and other works which may be attributed to the artist show him an adherent of the school of Lucca, closely related to Cippo di Marcovaldo. The Magdalen Master is cited as an artistic descendant of Migliore di Jacopo.

**A Madonna by Giovanni Pisano.**—In *Jb. preuss. Kunsts.* 1930, pp. 165-174, M. WEINBERGER publishes for the first time a marble group of the Madonna seated with the Child found in the Pisan Camposanto. The group is somewhat mutilated about the head and arms but shows the indubitable stylistic characteristics of Giovanni Pisano. It must date about 1312.

**Maestro Stefano and Nicolò di Pietro.**—In *Jb. preuss. Kunsts.* 1930, pp. 94-109, E. S. VAVALÀ makes of Maestro Stefano one of the preëminent Venetian masters of the trecento by the works that she attributes to him. Nicolò di Pietro she considers his pupil rather than a follower of Lorenzo Veneziano. Maestro Stefano and Nicolò di Pietro then form a continuous line of development from the Byzantine tradition to the Venetian quattrocento.

**Two Trecento Venetian Panels.**—In *B.A.I. Chicago*, 1930, pp. 86-89, D. C. RICH publishes two panels (a St. John the Baptist and St. Catherine) recently given to the Art Institute by Mr. and Mrs. Worcester, which he assigns to a Venetian trecento painter in the milieu of Maestro Paolo.

**Sieneſe Trecento Paintings.**—In *Dedalo*, 1930, pp. 329-362, B. BERENSON attributes works to Gualtiero di Giovanni, Andrea di Bartolo, and "Maestro di Panzano."

**A Work of the Duccio Atelier.**—In *Belvedere*, 1930, pp. 141-142, H. BEENKEN

publishes a half-length Madonna found in the Castello di Langeaise and recently given to the Institut de France which is very close to the style of Duccio in his late development.

**Pietro Lorenzetti.**—In *L'Arte*, xxxiv (1931), pp. 332-346 (6 figs.), C. BRANDI describes some hitherto unpublished frescoes which he attributes to Pietro Lorenzetti—an attribution in which Berenson concurs. The frescoes, which represent the Annunciation and six saints, are dated 1345 and are in the little church of S. Michele Arcangelo at Castiglion del Bosco. This is near Bibbiano, the place concerned in the last notice of Pietro. The frescoes are badly damaged but still show Pietro's late style very clearly.

**Paintings by Giacomo del Mino del Pellicciaio.**—In *Bul. senese di storia patria*, 1930, pp. 243-267, F. MASON PERKINS reviews the documents relative to this fourteenth-century Siennese painter and studies the paintings that may be attributed to him.

**A Lorenzettian Eve.**—In *La Diana*, 1930, pp. 215-218, P. MISCIATELLI discusses painting No. 11621 in the Louvre, in which the Temptation of Eve is represented at the foot of a Madonna enthroned among angels and saints. The history of the representation of this motive of Eve Tempted is traced from the *Historia Libri Genesis* of 1173. The Louvre picture finds its closest parallel in the fresco by Ambrogio Lorenzetti in the Pieve of S. Galgano, but is not so good and is evidently somewhat later and not strictly of the school of Ambrogio.

**Francesco di Traino.**—It has been generally believed that Traino's Triumph of St. Thomas in S. Caterina, Pisa, antedates the panel of S. Domenico painted in 1344-45. But P. BACCI (*La Diana*, 1930, pp. 161-175) has found a document which shows that the St. Thomas composition dates from 1363. As to style, it shows Lorenzettian influence rather than that of Orcagna, as Vasari thought. All the documents relative to Francesco di Traino are enumerated and attributions to him of the Triumph of Death, the Last Judgment, and other frescoes in the Pisan Camposanto are suggested.

**Frescoes in S. Domenico d'Arezzo.**—In *Rivista d'arte*, 1930, pp. 221-228, M. SALMI studies the frescoes in the Cappella Dragonelli in S. Domenico d'Arezzo, the four evangelists of the vault which Vasari attributed to Luca Tommè. The style suggests, however, that they are the work of the author of the frescoes of the Collegiata di S. Gimignano but a little earlier. The old dating of the Collegiata frescoes, ca. 1380, seems preferable to that more recently proposed, 1350. F. MASON PERKINS, in *La Diana*, 1930, pp. 187-206 (24 figs.), arrives independently at the same conclusion regarding the authorship of the S. Domenico frescoes and makes attributions of paintings elsewhere to Siennese artists.

**Baptistery Sculpture at Pisa.**—Sculpture on the exterior of the Baptistery at Pisa which has hitherto remained unpublished or inadequately photographed will soon be published in large, clear reproductions by M. MARANGONI. In the meantime, in *L'arte*, xxxiv (1931), pp. 195-222 (16 figs.), he discusses the sculpture in the light of these recent photographs, which clarify the relationships of Niccolò and Giovanni Pisano and their ateliers to the work.

**A Panel by Giovanni di Paolo.**—In *L'Arte*, xxxiv (1931), pp. 43-47 (2 figs.), A. VENTURI publishes a beautiful panel of the Assumption in a private collection in Rome by Giovanni di Paolo. It is a marvel of goldsmith's art and shows how this artist valued purity and richness of color for their own sake rather than for the mysticism that Fra Angelico expressed through them. The picture is a masterpiece of the Siennese quattrocento.

## FRANCE

**The Iconography and Date of the Mosaics of La Daurade.**—In *Art Bulletin*, xiii (1931), pp. 80–104 (2 figs.), H. WOODRUFF offers an iconographic reconstruction of the series of mosaics in the church of Nôtre Dame de La Daurade at Toulouse. Because the mosaics as described by Lamothe in 1633 form an incomplete cycle, Miss Woodruff concludes that they were executed prior to the erection of the choir, and she determines the probable original arrangement including the subjects that are now lost. The strong connection between La Daurade and work at Ravenna, together with the historical relations between Toulouse and that city, lead to the conclusion that the mosaics of La Daurade represented work of the fifth or sixth century under Ravennate influence.

**Merovingian Triens.**—In *R. Num.* xxxiii (1930), pp. 173 ff., H. LONGUET concludes that the Merovingian triens pieces that have the face in front view are derived wholly from Byzantine and not from Visigothic models, as sometimes supposed.

In the same number, p. 192, a hoard of mediaeval French coins found in 1927 is analyzed and described by CH. MACÉ. The treasure, buried between 1249 and 1253, consisted of 1194 pieces from the reigns of Philip II, Louis VIII and IX, and from the Abbey of St. Martin, from Le Mans, Brittany, Anjou, Poitou, Riom, Provence, Champagne, also four rare deniers of Vierzon. Especially interesting are the omissions, which have significance for the history of the period.

## GERMANY

**The Capitals of St. Jakob's in Regensburg.**—In *Münch. Jb.* vii (1930), pp. 281–292 (22 figs.), H. KARLINGER investigates the dating of St. Jakob's in Regensburg on the evidence of its capitals with interlaced palmettes. There is one type, especially, in which the leaves spring out into a C form in the upper middle part of the side of a capital that, through comparison with other developments of this motive, is shown to date as early as the middle of the twelfth century. From a study of other types of capitals as well in St. Jakob's it is concluded that there were three groups of sculptors working here, from about 1150 to about 1180.

**A Cologne Diptych at Bocholt.**—In *Z. Bild. K.* lxiv (1931), pp. 252–254 (4 figs.), A. LIEBREICH discusses a hitherto almost unnoticed diptych in the parish house of St. George at Bocholt. On the interior the painted compositions represent the Crucifixion and Coronation; on the outside are the Crucifix and Sts. Francis and Clara. The work is of special importance because it clearly falls in the scantily represented series of Cologne paintings of the early fourteenth century. Its date must be about 1320, and it most probably derives from the Cloister of St. Clara.

## RUSSIA

**Russian Icon Painting.**—In *Art Bulletin*, xii (1930), pp. 346–373 (29 figs.), Y. A. OLSUFIEV discusses the development of Russian icon painting from the twelfth to the thirteenth century. From the earliest period there are examples representative of both abstract and naturalistic tendencies. It is only in late work, when color plays a subordinate rôle in icon painting, that metal ornaments come to cover a large part of the pictures.

## SPAIN

**Processional Cross.**—In *Metr. Mus. Studies*, iii, 2 (June 1931), pp. 238–254 (11 figs.), W. L. HILDBURGH discusses a processional cross which has been in the Metropolitan Museum since 1917. In many important particulars this cross is

unique: in the shape and proportions of the limbs; in the type of crucifix, in the character of the details of decoration; and in various other respects. Comparison is made with a few other crosses of generally similar type, among which is one of gilt copper in Budapest and with which the cross under discussion has sometimes been associated. Some of the decoration of the cross in the Metropolitan was apparently derived from Spanish illuminated manuscripts of about the eleventh century. The writer would associate the crosses of this type with Santiago de Compostela, and detects in them possible evidence on the origin of a group of works among which is the famous frontal in the Burgos Museum.

### GREAT BRITAIN

**The Origins of Irish Iconography.**—In *R. Arch.* xxxii (1930), pp. 89-109 (4 figs.), FRANÇOISE HENRY discusses the attempt of A. Kingsley Porter to establish direct connections between Irish sculptures and works from the Orient. Henry establishes a chronological sequence for Irish crosses and calls attention to Oriental traits in their iconography which apparently belong for the most part to the illustrations of psalters; it appears, however, that there are striking similarities in Irish crosses and Carolingian ivories, both of which were influenced by the same models, and that the crosses are the presages of the Romanesque art.

**Saxon Funeral Stone at Worcestershire.**—In *Ant. J.* xi, 3 (July 1931), pp. 225-228 (pl.), G. BALDWIN BROWN discusses an oolite stone in the house of Sir Edmund Lechmore near Hanley Castle, Worcestershire. The stone has a form suggestive of an antefix from a Greek temple, measuring 20 inches in height, 11 inches in width, and from about 3 or 4 inches in thickness at the top to about 8 inches at the base. It bears the figure of Christ holding a book. The back of the stone bears a cross-head decoration. The Saxon character of the decoration is clear. Strong resemblances are seen to a Saxon funeral monument in the church of Whitechurch, Hants. Professor Brown argues in favor of associating the Lechmore stone, using, among other evidence, similarity in decorative features, with the Deerhurst Church of the earlier half or the middle of the tenth century.

**Eleventh-Century Grave-Stones.**—In *Ant. J.* xi, 2 (April 1931), pp. 133-135 (2 pls.; fig.), A. W. CLAPHAM discusses three carved stones in the possession of the Society of Antiquaries, which he concludes were used as grave-stones and belong to the Ringerike art, a period in the eleventh century when Danish influence was strong.

**Illuminated Charter of 1291.**—In *Ant. J.* xi, 2 (April 1931), pp. 129-132 (pl.), CHARLES CLAY discusses a charter by King Edward I, granting to Roger de Pilkington and his heirs free warren in certain lands in the county of Lancaster. The document is particularly important because of the rich illumination surrounding all four sides, thirty-two figures of animals and birds appropriately alluding to the subject matter of the charter. Some of the sketches are drawn very realistically; the coloring is rich.

### RENAISSANCE

#### GENERAL AND MISCELLANEOUS

**The Restoration of Ceramics.**—In *Faenza*, xix (1931), pp. 33-44 (11 figs.), F. PRONI, chief of restorers for the R. Soprintendenza alle antichità dell' Emilia e della Romagna, goes with some detail into the process of restoring ancient ceramics—the washing away of incrustations with water and sulphuric acid, the cementing together of fragments, the supplying of missing fragments. Recipes are given for the materials used in the various steps of the process, and as far as is

possible in a general statement the difficulties of the various processes are pointed out.

### ITALY

**Italian Maiolica.**—In *Faenza*, xviii (1930), pp. 89–97 (7 figs.), and 141–153 (21 figs.), B. RACKHAM explains the derivation of the term maiolica (ultimately from the name of the Island of Majorca), the significance of its composition (the essential feature is the tin glaze), and the development of the art in Italy. In general the Italian development falls into two large divisions, that in the region of Faenza and that in the region of Urbino. The earlier development was at Faenza and especially in its initial stages was more Gothic, traditional, decorative in style. The development at Urbino began a little later and was mainly pictorial. While the plastic quality of the ceramics was always of high standing, the painting came to be chiefly stressed and artists of high calibre painted on dishes just as they might have painted on walls or canvases. Often literary descriptions, book illustrations, wall paintings, and the like, furnished the inspiration, but the best maiolica painters were not mere copyists; their adaptations involved artistic invention. Groups of works are here attributed to some of the outstanding painters, whose names, to be sure, are not always known.

**The Tabernacle of Figline near Prato.**—In *L'arte*, xxxiv (1931), pp. 105–119 (4 figs.), M. PITTALUGA suggests a possible source of inspiration for Masaccio's Uffizi St. Anne in the fresco of the same subject that decorates the tabernacle of Figline near Prato. The composition of the latter is more similar to Masaccio's than is that of any other known work. This fresco and the others that decorate the tabernacle have been little noticed and then attributed to Agnolo Gaddi. But comparisons are here cited to show that the work is by Nicolò di Pietro Gerini, done about the time that he decorated the Cappella Migliorati in S. Francesco at Prato, 1392, or a little later.

**A Drawing by Fra Angelico in Barcelona.**—After examining the five drawings commonly attributed to Fra Angelico and rejecting all as the work of followers, A. VENTURI in *L'arte*, xxxiv (1931), pp. 244–249 (fig.), publishes a study for the Christ of the great Deposition in the Museum of S. Marco. This drawing, in the collection of Francesco de A. Gali Fabra, shows the characteristics of the master so strongly as to make the authorship unquestionable.

**Andrea del Castagno.**—In *Rivista d'arte*, 1930, pp. 37–49, G. PUCCI publishes a fresco of the Madonna enthroned among angels and saints in the Castello del Trebbio near Florence. It has formerly been attributed to the manner of Andrea del Castagno, but is here assigned to the master himself and referred to the period between 1445 and 1450.

**The Pitti Palace.**—In *Jb. preuss. Kunsts.* 1930, pp. 110–129, K. H. BUSSE determines the date of the Pitti Palace between 1458 and 1466 and reproduces views of Florence from 1469 to 1783 in which the Pitti Palace appears.

**The Polyptych of Nicolò Alunno in Gualdo Tadino.**—In *Boll. d'arte del Ministero dell' Ed. Naz.* 1930, pp. 131–137, R. GUERRIERI publishes two documents that concern this polyptych, dating its creation in 1470–71. It has recently been restored.

**Andrea Solario.**—In *Gaz. B.-A.* 1930, pp. 170–183, A. DE HÉVÉSY discusses the activity of Leonardo's pupil Andrea Solario in relation to the pre-Leonardesque Lombards, the Venetians, Leonardo, etc.

**Alvise Vivarini.**—In *Der Cicerone*, 1930, pp. 500–501, T. BORENIUS publishes a small panel of St. Jerome in a Landscape of the Thomas Harris collection, London. The panel is signed *Ludwicus Vivarinus pinxit*, but the present writer considers it the work of Alvise Vivarini, between 1475 and 1480.



**Inscriptions Used by Mantegna.**—In *Atti del R. Inst. Veneto*, lxxxix (1929-30), A. MOSCHETTI cites as proof of Mantegna's humanistic education the Roman lapidary inscriptions in the frescoes of the Eremitani. They are shown to be faithful to the original sources.

**Francesco di Giorgio.**—In *Der Cicerone*, 1930, pp. 549-552, P. SCHUBRING accepts Planiscig's attribution (in *Wiener Jb.* 1929) to Francesco di Giorgio of the terracotta bust of the young John the Baptist in the Kaiser Friedrich Museum. He attributes to this master also the bust of the Magdalene in the South Kensington Museum, there assigned to Donatello. He believes it should be dated ca. 1490.

**Carlo Crivelli.**—In *Rivista d'arte*, 1930, pp. 237-241, G. FIOCCO attributes to Carlo Crivelli the Madonna Adoring the Child in the Pieve di Poggio di Bretta (Ascoli) which Serra had regarded as the work of Alamanno.

**A Newly Discovered Tondo by Botticelli.**—In *Burl. Mag.* 1930, pp. 153-154 and in *Art News*, 1930, p. 11, G. FIOCCO publishes a tondo of the Madonna and Child between St. John and an angel which has recently come into the E. W. Edwards collection, Cincinnati. It is attributed to Botticelli and is dated about 1487.

**Two Florentine Madonnas.**—In *Pantheon*, 1930, pp. 512-513, G. GRONAU compares the Madonna Strozzi by Filippino Lippi in the J. Bache collection, New York, and the Madonna by Piero di Cosimo in the collection of the king of Sweden, showing that the latter (dating ca. 1490) is clearly inspired by the former (dating ca. 1487). The Strozzi Madonna is copied also in a picture by Raphael in the Gallery of Mainz.

**Jacopo Sansovino in S. Marco.**—In *L'arte*, xxxiv (1931), pp. 30-42 (8 figs.), A. VENTURI discusses bronzes in S. Marco, Venice, executed by Jacopo Sansovino. Figures of the evangelists in the round and reliefs on a door and pulpit show a combination of Michelangelesque characteristics with Venetian picturesqueness.

**A Fifteenth-Century Master.**—In *Art in America*, 1930, pp. 305-309, R. C. MORRISON gives to a minor Siennese master, Pietro di Domenico, three panels, representing the Madonna and Child, and two half-length saints in the Metropolitan Museum, New York, the Seminario Arcivescovile at Siena, and in the Piccolomini collection at Siena.

**Sperandio.**—In *Münch. Jb.* vii (1930), pp. 293-318 (19 figs.), W. WEINBERGER traces the activity of the fifteenth-century artist Sperandio and separates his work from that of Francesco Francia. Sperandio worked in Bologna, Mantua, Venice, and Ferrara. He is rightly rated below Pisanello as a medallist, but he was primarily a sculptor rather than a medallist and had a strong feeling for the plastic character of his work and for vivid personality in his portraits. He worked in various materials and in the round as well as in relief.

**A Fifteenth-Century Florentine Book of Drawings.**—In *Rivista d'arte*, 1930, pp. 87-95, M. SALMI examines the drawings of the Koenigs collection at Haarlem from the Trivulziana at Milan. Salmi agrees in most ascriptions with A. E. Popham, differing mainly in regard to some from the school of Benozzo.

**Portrait of a Young Woman by Credi.**—In *L'Arte*, xxiv (1931), p. 348 (pl.), A. VENTURI publishes a beautiful portrait in the collection of Barone Michele Lazzaroni, Rome. It shows the hand of Lorenzo di Credi when he was under the influence of Botticelli, and it ranks with the finest portraits of the Florentine quattrocento.

**Unpublished Paintings by Gaudenzio Ferrari in Rome.**—In *L'arte*, xxxiv (1931), pp. 161-162 (2 figs.), W. ARSLAN publishes two masterpieces by Gaudenzio Ferrari. One is a Pietà in a private collection. It is similar to the Crespi composition now in the gallery at Budapest, but is earlier, probably dating in the first decade of the sixteenth century. The second picture, a Nativity in the Briganti collection in



Rome, is one of several versions, recalling most closely the Nativity in the Holford collection, painted about 1520.

**Illuminations by Girolamo Campagnola.**—In *Rivista d'arte*, 1930, pp. 51–80, S. DE KUNERT publishes the miniatures that decorate two codexes given in 1509 to the Collegiata S. Giustina in Monselice, where they still remain. Stylistic characteristics, especially Mantegnesque-Paduan features, suggest Girolamo Campagnola as the painter, aided in the better figures by his son.

**Two pieces of Macerata Ceramics.**—In *Faenza*, xix (1931), pp. 45–46 (4 figs.), are published two jugs that are of interest not only for their decoration but also for their connection with a patriarchal period that is wholly foreign to the modern age. The two pieces evidently came from the same atelier, which is here suggested to be that of Deruta in about 1515, and the decoration also indicates that they were made for the commune of Macerata.

**Titian's Annunciation in Treviso.**—In *Münch. Jb.* vii (1930), pp. 319–337 (8 figs.), K. OETTINGER studies the Annunciation in the right choir chapel of the cathedral at Treviso, which is customarily assigned to the early period of Titian's activity. He gives convincing reasons for believing that not only is the upper half of the picture not Titian's but that the Annunciation angel and the donor are not his work. The conclusions are that about 1516 Titian painted a horizontal panel of the Annunciation which finds its closest analogy for composition in his *Sacred and Profane Love*; in the late twenties, not later than the death of Vikar Malchiostro Broccardi, Paris Bordone, pupil of Titian and native of Treviso, who had carried out other commissions for Malchiostro Broccardi, changed the proportions of the picture to suit the latter's chapel, substituted an angel suitable to this altered proportion, and added the figure of the donor Broccardi and his coat of arms.

**Raphael and his Workshop.**—In *Münch. Jb.* viii (1931), pp. 49–68 (17 figs.), F. BAUMGART discusses a few of the aspects of the work of Raphael and his atelier. The four large representations on the ceiling of the Stanza d'Eliodoro have formerly been ascribed to Baldassare Peruzzi, who did the rest of the ceiling decoration, but stylistic analysis shows a dependence of the designs upon Raphael and warrants an ascription of their execution to his pupil Penni. Some paintings now in the Palazzo Zuccari in Rome are shown to be those which Vasari tells us Giulio Romano painted in the Villa Lante, and by comparison with these the so-called pictures in the Stanza of Constantine in the Vatican are attributable to the same painter. Finally, a survey of the grisaille compositions in the Stanze of Raphael indicates a more extensive decoration with them originally and proves through the extant copies that they exerted an important influence upon sixteenth-century painters.

**The Della Robbias and Palissy.**—In *Faenza*, xviii (1930), pp. 101–114 (5 figs.), G. LEVALLET discusses the career of the artist-scientist Bernard Palissy, born at Agen about 1510. Palissy is of interest today chiefly for his detailed writings concerning himself and his studies. His interests were primarily scientific rather than artistic. Having seen a beautiful piece of enameled pottery, he spent many years searching for the secret of successful enameling and finally succeeded in discovering how to enamel in a considerable range of colors. His colored enamel reliefs became popular, especially those which he made as part of the decoration of grottoes that he constructed in gardens of the wealthy. Though he modeled the reliefs, it was the coloring rather than the modeling that chiefly took his attention, just as it was the naturalistic appearance of objects—especially all kinds of insects and animals—that he sought above the artistic. These characteristics relate him more closely to the later generations of the Della Robbias than to the originator.

Luca, who was primarily a sculptor. Palissy shows closest affinity with Girolamo della Robbia, who worked much in France under Francis I.

**Doge Portraits by Titian.**—In *Pantheon*, 1930, pp. 489-494, D. VON HADELN summarizes the work of Titian as portraitist of public officials and publishes a portrait of Doge Gritti belonging to Otto Gutekunst, London, unique in the work of Titian in that it is seen in profile and gesticulating. This pose suggests that the portrait may be a fragment from the votive composition which Titian is known to have executed for the Sala del Collegio at the Ducal Palace in 1531 and which was destroyed by fire in 1575 and succeeded by an analogous composition by Tintoretto, in which the figure of the doge closely resembles that in the Gutekunst collection. There is here published also a portrait of Doge Francesco Veniero in the Schloss Rohonc collection, which the author attributes to Titian and dates ca. 1555. On the other hand, he disputes the Titian attribution of the portrait of Doge Priuli recently acquired by the Detroit Museum. He thinks it is of inferior quality and suggests that it may be by Girolamo di Tiziano.

**A Work by Jacopo Sansovino.**—In *Boll. del Museo Civico di Padova*, 1930, 27 pp., A. MOSCHETTI publishes a stucco reredos found in an upper room of the suppressed Scuolà di S. Rocco at Padua and restored and removed to the Museum. The reredos measures 4.10 m. by 4.20 m. and contains a number of smaller sculptured figures and scenes besides life-size figures of Sts. Roch, Lucy, and Catherine. Documents referring to the work assign it to about 1536. But it is on stylistic considerations that the attribution to Jacopo Sansovino is made.

**The Resurrection by Bronzino.**—In *Rivista d'arte*, 1930, pp. 291-296, A. CHIAPPELLI cites the contract giving Bronzino the commission for the picture of the Resurrection in the church of the Servi in Florence. The date of the contract is April 8, 1549.

**A Romagnole Ceramist in Lombardy.**—In *Faenza*, xix (1931), pp. 53-54, is published a document that gives proof of the introduction of Faentine majolica into Lombardy. This document is dated in February 1576, and tells us that a certain artist of Romagna, Pietro Covelli from Cesena, brought five chests of Faentine majolica to Cremona, where, unable to dispose of them by ordinary sale, he attempted to raffle them off.

**A Contribution to Renaissance Iconography.**—In *Munch. Jb.* viii (1931), pp. 189-192 (3 figs.), E. TIETZE-CONRAT publishes an engraving by Marco Dente of a young woman leading a lion to a burning log, a composition that is clearly in the style of Raphael. The subject is interpreted as the curbing of passion through fear. The economy of the iconography of the period is illustrated by two other works, the medal of Christoph Müllich, dated 1534, and the engraving by Hans Frank, of 1516. These two examples follow the Dente composition almost exactly, making only the slightest changes to express different meanings: the medal illustrates woman's power to subdue boldness; the subject of the engraving is the Heavenly Lion, or Jesus Christ.

**Ceramics at Fano.**—In *Faenza*, xix (1931), pp. 59-70, G. CASTELLANI traces the history of the art of ceramics at Fano as it can be gleaned from documents. Some of these go back as early as the middle of the fifteenth century, giving the names of masters of the art and something about their work. The outline is here brought down to the early nineteenth century and in a future article will be brought to date.

#### GERMANY

**Two Dürer Problems.**—In *Munch. Jb.* viii (1931), pp. 1-48 (29 figs.), E. PANOFSKY studies Dürer's engraving of the "Dream of the Doctor" (B.76, of

about 1498-99) and the painting of the Four Apostles in Munich. The engraving is interpreted as an "Acedia" representation. The sleeping man is off his guard—he is visited by temptations in his sleep, temptations that appear here in the form of a nude woman, a little cupid, and insinuations blown into his ear by a devil. This is, essentially, a mediaeval allegory of melancholy. Melancholy is closely allied in mediaeval interpretation with idleness, torpor, a condition susceptible to temptations. Many years later, in his painting of one of the Four Apostles, Dürer expressed the new, humanistic conception of melancholy, in which this temperament is identified with genius, noble meditation. Comparison with the engraving B.46 (1523/26) proves to the present author's satisfaction that in the right panel Dürer originally planned to have a single figure, that of Philip. The assumption is that the original intention was to use the two panels as wings of a triptych, with possibly a Santa Conversazione in the center, and that with the triumph of Protestantism the commission fell through and Dürer, left with the unfinished panels on his hands, transformed the subject to make it a suitable monument to Protestantism. It was thus that Philip was changed into Paul—a suitable representative of Protestantism and of the new version of melancholy—and that extra figures were introduced into the panels, so that the four temperaments and at the same time Four Apostles were represented.

**Drawings by Holbein the Younger.**—In *Münch. Jb.* viii (1931), pp. 156-171 (20 figs.), T. MUCHALL-VIEBROOK publishes eight drawings of apostles in the Musée Wicar in Lille which he attributes to the early period of Hans Holbein the Younger. A single figure is represented on each sheet and they are evidently the remnants of a complete series of twelve. The drawings are in a chiaroscuro technique and on some the signature H. H. is still clearly visible; three are dated 1518. Works of Hans Baldung-Grien, among them some engravings of apostles, show the influence of this master upon Holbein in his early drawings. And among the works of Holbein himself parallels for the Lille apostles may be seen in the decorated table top of 1515 in the Landesmuseum at Zürich and a representation of a soldier in the Landesmuseum at Braunschweig. There exist also copies of Holbein's works in which there are striking parallels: most pertinent are the oil copies of a series of nine pairs of prophets that now hang in the so-called Bischofshof near Basel Cathedral.

**Four Dürer Drawings.**—In *Z. Bild. K.* lxiv (1930), pp. 192-199 (10 figs.), N. BEETS publishes four drawings in a private collection in Amsterdam which he attributes to Dürer and dates according to their relationship to other works by the master. They are a full-length St. Margaretha, studies of gloved hands for the Rosenkranzfest in Strahov, a Madonna holding the swaddled Child, made in preparation for the engraving of 1520, and a sheet of costume studies dated 1527.

**The Art of Munich.**—In *Münch. Jb.* vii (1930), pp. 338-379, O. HARTIG publishes documents concerning Munich artists and art objects which he has gleaned from the archives and manuscript notices of the state and city archives and libraries of Munich. These are supplemented by references from published literature. This, the second of Hartig's contributions on the subject, covers the period from 1520 to 1559.

**Peter Vischer Studies.**—In *Münch. Jb.* viii (1931), pp. 133-155 (8 figs.), R. BERLINER reviews the recent contributions to our knowledge concerning the Vischer atelier, discusses the personnel of the studio, and attributes to Peter the Elder a bronze Hercules in the National Museum at Munich, which he dates about 1525.

**The Bocksberger Family of Painters.**—In *Münch. Jb.* vii (1930), pp. 185-280 (62 figs.), M. GOERING gives all available documentary evidence concerning the

Bocksberger family of painters, publishes a catalogue of their works, and discusses the style of extant sketches, drawings, and paintings. The family came from Salzburg. The first of whom we have information was Hans Bocksberger the Elder, who lived from about 1515 to about 1569. His style, derived largely from Giulio Romano, may be studied in the frescoes of the Stadtresidenz in Neuburg, where his work is definitely distinguished from that of his assistants, who decorated some of the rooms; in the Schloss Freisaal at Salzburg; and in a few single works. Melchior Bocksberger (ca. 1525-1587), evidently a near relative, likewise shows the influence of Giulio Romano and also of Tintoretto and, later, of Paolo Veronese. There are a number of examples of his decorative work in the Residenzmuseum at Munich, and sketches are extant for his decorations on the façade of the Rathaus at Regensburg. In the latter work Hans Bocksberger the Younger participated. Though little is known of this last painter, he is the one usually thought of when the name Bocksberger is mentioned. He was an illustrator primarily and must be studied in his extant drawings and in the engravings for which he made drawings.

#### AUSTRIA

**Two Frescoes from Brün.**—In *Z. Bild. K.* lxiv (1931), pp. 221-225 (3 figs.), M. STEIF publishes two frescoes that were discovered in 1906 in the Minorite Cloister in Brün. One of these, extending over two walls, represents the Bearing of the Cross; the other portrays the Mocking of Christ. Both are exciting and vigorous in the delineation of the figures but mild and harmonious in coloring. They are undoubtedly the work of Jörg Breu the Elder, many of whose figure types are seen here as well as his characteristic Italian landscape and architectural background, which he acquired from a visit to Italy. Resemblance is closest to his works dated in the first years of the sixteenth century. The Bearing of the Cross is plainly dated 1508; thus the frescoes assume a significance in the chronology of Breu's *œuvre*.

#### THE NETHERLANDS

**Rembrandt Drawings.**—In *Met. Mus. Studies*, iii, 2 (June 1931), pp. 135-146 (15 figs.), W. R. VALENTINER discusses seven drawings by Rembrandt now the property of the Metropolitan Museum, and a welcome addition to this Museum's very few drawings from this master's hand. The subjects of the drawings are: a man seated on a step, a woman reading, three landscapes, a woman hanging to the gallows, and the Old Testament story of Nathan admonishing David. These drawings clearly belong to separate periods in the artist's career.

#### SPAIN

**A Self-Portrait by Goya.**—In *Art Bulletin*, xiii (1931), pp. 4-11 (2 pls.), A. V. CHURCHILL publishes a portrait of Goya by himself which has recently been acquired by the Smith College Museum of Art, at Northampton, Mass. The portrait evidently dates between 1808 and 1813, and shows the artist after he had become entirely deaf and had suffered many other tragedies. It is one of the finest examples of Goya's brilliant technique; fortunately it is perfectly preserved.

#### GREAT BRITAIN

**The Chalice and Paten of William Archer.**—In *Art Bulletin*, xiii (1931), pp. 106-117 (10 figs.), E. B. SMITH publishes a chalice and paten in the Museo Cristiano in the Vatican Library. The two splendid examples of the silversmith's art evidently belong together, and comparison with related works date them at about the same time—the chalice between 1500 and 1515 and the paten between 1500 and 1520. Both pieces bear inscriptions, which are so treated as to form part of

the decoration. We learn from the inscription on the chalice that it was made for William Archer, who was a citizen of Kilkenny at the close of the fifteenth century. Whether the two objects were made by English or Irish artists, the tradition is English.

### CENTRAL AMERICA

**Guatemala.**—In (University of Pennsylvania) *Mus. J.* xxi, 1 (March 1930) ROBERT BURKITT, in two articles, discusses excavations conducted by him in 1913. The first (pp. 5-49; 6 folding plans, profiles, etc.; 40 photographic figs.) describes excavations at Chocolá. A number of round mounds are found in this locality. One was thoroughly opened, first by trenching and then by hollow-step excavation. There was an original loose, sandy, core mound overlaid with leaves (palm?) and later a casing mound built over the first. No certain evidences of interment or of any structural work appeared. Mere fragments of stone weapons, etc., were all the artifacts found. The center of the inner core mound, however, was full of ashes and charcoal. Mr. Burkitt wonders whether this may be a burial. In the second article, *Explorations in the Highlands of Western Guatemala* (pp. 41-76; 4 folding plates, 8 photographic figs.), several ruinous sites are described, especially Xoch, Chipal, and San Francisco. Extremely rude limestone images, sunken stone yards of considerable size, and ruined stone buildings, some of which are of the familiar pyramidal type, were characteristic finds. No digging was done, merely surface exploration with occasional cutting away of brush, cane, etc. Several so-called idols were found; one in particular seems to have been "modernized" by plastering over a very primitive stone carving. In fact, there seems to be much evidence of plastering over the stone construction as well, in this region. Interesting pottery has been found in a mound near Las Galleras, but this was not seen by Mr. Burkitt.

### NEWS ITEMS FROM ATHENS

The interest aroused last year by Sir Rennell Rodd for an exploration of the island of Ithaca led to a second campaign this autumn. A preliminary report from Mr. Heurtley, who was in charge of the excavations, is now available. Some supplementary digging on the site of the prehistoric settlement at Pelikata has yielded a considerable number of Helladic vases. In the cave-sanctuary of the Bay of Polis, where the sherd with the Prayer to Odysseus was found last year, Miss Benton has successfully overcome the difficulty of working below the level at which sea water filters through, and has unearthed a great deal of Mycenaean and sub-Mycenaean pottery, from which it has been possible to reconstitute some thirty vases, including several of unusual form. These are of particular interest as being approximately contemporary with the assumed date of Achaean supremacy in Ithaca. Mr. Heurtley also investigated the region of the isthmus connecting the northern and southern sections of the island. On the saddle connecting Mt. Aetos with Southern Ithaca, where the modern church of St. George stands, he has found remains of a Greek city dating from about the fourth century B.C., with a square tower showing some ten courses of admirable construction. A rich deposit of early proto-Corinthian pottery, together with some late Geometric fragments, was also found in this region. In the upper deposit (proto-Corinthian) there were also numerous small votive offerings, mostly of bronze but some of ivory, and beads of glass and amber. These lay near a wall which Mr. Heurtley considers Mycenaean in date and which shows evidence of having been destroyed by fire. Within the enclosure formed by the wall were quantities of Mycenaean, sub-Mycenaean, and proto-Geometric pottery.

During the excavations carried out by the Greek Archaeological Society on the

site of ancient Sparta, a mausoleum containing four graves was found in the ravine between the Eurotas river and Mount Taygetos. The walls of the mausoleum are decorated with well-preserved paintings on gypsum, which, judging by the fragments of the inscriptions, depict the nine Muses with Apollo. The paintings appear to date from the first century A.D. The discovery is considered important as demonstrating the continuance at Sparta, during the last pagan centuries, of a classical school of painting similar to the Alexandrine and Pompeian.

The American School of Classical Studies in Athens had a very busy excavation season in the spring and summer of 1931, for, in addition to their main project in the Agora district of Athens, they were digging at several points in Corinth, and it was under their auspices that Professor David M. Robinson of Johns Hopkins carried out his second campaign at Olynthus. The excavations began at Olynthus on March 25 and continued until June 18. During the course of the work twenty-seven houses were discovered as well as many shops. Four wide streets running north were found with many cross streets, so that it was possible to reconstruct the city plan. One entire block of ten houses was excavated in which five of the houses were joined one to another, and these separated by a narrow alley at the back from a similar series of five other houses. It was in this block that two important hoards of silver coins were found as well as vases, terracottas and bronzes. The most interesting feature of the houses was, probably, the appearance of pebble mosaics with elaborate designs and mythological scenes, twelve of which were found. One of them represents in blue and white natural pebbles, Bellerophon, on a spirited-winged Pegasus, hurling a spear at the Chimaera beneath him. The attitude of the horseman here appears, in Professor Robinson's opinion, to be very like that used in the famous Thracian and Roman rider reliefs. A typical house plan at Olynthus consisted of a central court surrounded by a loggia with three columns on each side and balconies above, while behind the loggia were three rooms on each side of the court. In one house, called the House of the Comedian because of a terracotta representation of an actor found there, a bathroom opened off one of the larger rooms. This was easily identified, as the bathtub still remained in place, and in front of it the floor was paved with a white pebble mosaic sloping toward a drain. In this house were found some forty-six vases, twenty-six terracottas, ninety-eight loom weights, seven lamps, and an interesting bronze ring. In one house there was discovered a deed of sale, giving the owner's name and saying that Archidamus had bought the house from Sosion with a year's grace for delivery, and that the house was between those of Pythian and Polyxenus. This inscription thus gave the names of the owners of three houses which were completely excavated. Polyxenus was a magistrate whose name occurs on coins of the fourth century B.C. Professor Robinson surmises that he may have been a descendant of a Potidaean Polyxenus, who took refuge at Olynthus in the early fifth century and whose name, in the Corinthian alphabet, was found on a re-used stone in the "Prytaneum" in the civic centre. Two cemeteries were discovered and nearly two hundred graves were opened. These showed that both inhumation and cremation were practiced, and in several cases of the former type of burial four coins, instead of the usual one, had been placed in the mouth of the deceased to pay Charon's fare. Among the three hundred bronzes found was a pointed stylus in the shape of a two-headed crocodile. The coins were not only plentiful, there being 1,222 of them, but they were important for their commercial and historical significance, since the bronze coins came from nearly fifty different places and show, therefore, evidence of widespread trading, one coin coming from as far away as Tarentum. Of the 170 silver coins, ninety-five belong to the Chalcidic League. Three interesting silver hoards were found, one of which was buried only



half a meter below the surface, in a private house, and contained thirty-four large silver tetradrachms of very beautiful style. All but one were of the Chalcidic League and all but seven have magistrates' names, including some previously unknown.

The American School also assisted in financing the excavations of the Greek archaeologists of Eleusis, where the work was carried out at four different points in 1931. To the southwest of the Museum building Dr. Mylonas of the University of Illinois continued the excavations which he had begun in 1930, uncovering more prehistoric houses and securing enough pottery and other evidence to prove that the site was continuously occupied in the Late Helladic Period. In the other three regions Dr. Mylonas assisted Mr. Kourouniotis, the Director of the Department of Antiquities, in his investigations. In the area of the Telesterion, between the Peisistratidean and the older telesterion with the polygonal masonry, remains of a Mycenaean, or Late Helladic III, construction were brought to light as well as a peribolos wall of the same period running almost due east and west. Although no evidence has yet been obtained proving the purpose of the building, it is important for the history of the Sanctuary area. To the east of the eastern Triumphal Arch a large bathing establishment of the Roman period was cleared. This appears to have been used also in Christian times. With its large hall and hypostyle court, its hypocausts and baths all well preserved, it serves to illustrate admirably a provincial Roman thermal establishment. Beyond the west Triumphal Arch and the Roman tower, further excavations revealed a peribolos wall continuing the line of the Hellenistic polygonal wall which runs almost due west from the greater Propylaea to the Roman tower. The lower course of this wall is also polygonal, but is Peisistratidean in date. On this lower course had been built in Roman times a wall of poros blocks. The wall extends westward for at least twenty-five metres, and is then interrupted by a large gate guarded by a square tower. Beyond the tower the wall turns northward and, although further exploration of its course will be necessary, it is evident that this was the fortification wall of the town of Eleusis and that within it should be found traces of a sixth-century city, since behind the large gate were found a court and a second gate giving access to the main paved road of the city. A Peisistratidean tower was also discovered in the foundations of the Roman tower and between the lesser and the greater Propylaea a Peisistratidean wall closed the Sanctuary fortifications on that side and probably united these with the city fortifications, but the actual juncture cannot be seen, as it lies under the greater Propylaea. On the adjacent hill to the southwest where the mediaeval tower stands, a few days' work by Dr. Mylonas uncovered some of the fortification walls mentioned by Philios in one of his reports and showed that a future campaign there would bring to light important walls and towers.

At Hagios Kosmas, on the coast beyond Phaleron, Dr. Mylonas conducted a short campaign concentrating the work this season on the promontory with its prehistoric settlements. He has now cleared a complete block of four houses separated by a narrow, winding, but paved road. The houses have a large court and two connected rooms. The lower stone course of the walls is carried across the doorways forming the doorsill. The Late Helladic III settlement was surrounded by a fortification wall, parts of which were cleared, and it was evident that this wall encircled the top of the hill. Quantities of potsherds and some good vases were recovered while a stone seal of the bottle-shaped variety found in the remains of the oldest settlement would appear to have been imported from Crete in E. M. III. A few more graves were identified, at some distance to the east of the known site of the cemetery, and two of them explored. These proved to be identical with those cleared last year and seem to indicate that the cemetery covered an extensive area.

E. P. B.



## BOOK REVIEWS

BILDERATLAS ZUR RELIGIONSGESCHICHTE Herausgegeben von Dr. Hans Haas, Professor der Religionsgeschichte an der Universität Leipzig. 16 LIEFERUNG: *Mexikanische Religion* von K. Th. Preuss. xvii+15 Seiten. Leipzig. A. Deicherische Verlagsbuchhandlung. D. Werner Scholl, 1930.

If this brochure on Mexican (Aztec) Religion by K. Th. Preuss is typical of the fifteen others that have preceded it in the series, then the term "picture-atlas" gives a rather inadequate idea of their contents. For in addition to the 20 pages upon which are reproduced 73 carefully selected illustrations bearing on all phases of Aztec religion, this brochure brings XV pages of text which serve not merely to explain the significance of the pictures but, without pretending to be exhaustive or to enter into the discussion of the many moot points in Aztec mythology, furnish us a clear, concrete and coherent account of the essential factors composing that rather complex, not to say, tangled subject. Such a factual account as we find here will serve the novice and uninitiated well as an introduction to a subject which together with the kindred and more highly developed Mayan religion and civilization in Yucatan has recently been receiving considerable attention in the public press.

With constant references to the illustrations the author begins with the Aztec myth of creation and the Aztec cosmogony mentioning their four chief deities and their creations, explaining briefly the famous Aztec Calendar Stone preserved in Mexico City and giving some account of the thirteen heavens and the nine underworlds into which the ancient Mexicans divided the universe.

In his section, *Men and Stars*, the legendary origin of the tribes with their wanderings and the mythical creation of the stars and sun with the identification of some of the gods with the constellations of the night-sky are related. The chief section of the narrative, however, is devoted to an account of the gods of whom the four chief were: Quetzalcoatl, Tezcatlipoca, Mixcoatl or Comixtli and Uitzilopochtli. Originally personifying forces of nature, a fact which holds true of the tribal gods also, these four creator-deities have become so overlaid with specific functions and so identified with particular places and tribes that their original connection with the phenomena of nature is not always easy to explain. Thus Quetzalcoatl was also god of Tolula, Tezcatlipoca of Tezeuco; Mixcoatl or Comixtli, the cloud serpent, was the tribal god of Nexotzinco and Tlaxcala. The last named with Uitzilopochtli were the tribal gods of Mexico and had also a nature meaning as the Star of the North and the Sun-god respectively.

Preuss infers that Quetzalcoatl, the green plumed serpent, incarnates the ocean primeval. Historically he may have been a Toltec king. He was also worshipped as the Wind God. Tezcatlipoca was the eternally young god who rejuvenated himself annually and is represented as a little child with a dirty face. He, too, is identified with the stars. Uitzilopochtli, who was born without flesh or bones, was one of the terror-ghosts of the night-sky and was in general regarded as the Sun and War God. Mixcoatl, the cloud-serpent, besides being the tribal god of Tlaxcala, represents the Star World of the North. As the God of the Chase he is provided with a shield, arrows, banner and hunting pouch. As a cloud god he carries the lightning in one of his hands.

Besides these creator-gods are to be found in Aztec mythology a whole series of death-, night- and constellation-gods which were worshipped as terrifying spirits. Their descent from heaven took place in October and they belong to the night whose reflective image was the underworld in Aztec cosmogony.

One of the chief characteristics of the Mexican conception of the gods was the

close association of fire and water in the nature of many of their divinities. This finds expression especially in the night sky, in the mythical battles, which, according to Aztec conception, goes on continually between the moon and the stars. From this connection the symbols for fire and water became also the symbols for war.

Following this principle Preuss divides the pure nature divinities, who were regarded as creations of the creator-gods, into fire gods and water gods between whom stand the divinities of vegetation, particularly the maize god. These nature deities were worshipped quite as much as the creator-gods. In fact the sun-god, the rain-god and the maize-god were in reality the especial objects of the cult. This section of the text is concluded with a brief survey of the tribal gods whose name was legion.

The last section of his interesting narrative Preuss devotes to the cult itself. Fasting, chastity, sacrifice of one's own blood; dancing, song and music; incense of copal, the sacrifice of smaller animals, birds, butterflies, snakes, lizards, spiders, etc., and finally human sacrifices were the means employed in the religious cult. Even the gods fasted and went through all the performances of human beings when they wished to obtain some end. The ceremonial acts were first and foremost *magical means*, which, according to Aztec belief, were *per se* effective, partly for increasing one's own magic powers in the performance of ceremonies (fasting, chastity, etc.) and partly for producing an effect on natural objects, demons and gods, the two latter being preserved and strengthened in their powers by sacrifice.

Secondarily these ceremonies were conceived of as pious acts in relation to the gods who were thereby made willing to help human beings. But in so far as the gods to whom homage was paid were nature divinities, their power to help was limited. Only the creator-gods, and with them some of the tribal gods, could rise superior to this state of nature.

Human sacrifices had their origin in the necessity to preserve the sun in his course. The sun, which was one of the heavenly bodies created last and which is often symbolized by the eagle, fights continually with the night-sky, with the moon and with the stars. Before the birth of the sun, war, which moon and stars brought with them, was created in order that moon and stars might live on the hearts of the fallen and sacrificed warriors. War among men served the same purpose and was, therefore, of a religious character. For this reason it was often carried on merely to provide human material for sacrifice.

The author also musters in some detail the numerous festivals: vernal, harvest, summer and winter solstice, vernal and autumnal equinox, and above all the maize festival which were believed to exert a magical influence on the processes of nature and at which not only captives but even children were sometimes sacrificed. In conclusion mention is made of the numerous temples with their room for the image of the god, standing upon pyramids which represent the seat of heaven. In the City of Mexico alone there were 25 such pyramids, and the great plaza of the chief pyramid is said to have accommodated 8,600 warriors in one dance at a certain festival.

The illustrations of this book are reproduced chiefly from the various French, Spanish and Italian codices, a list of which, with the date and place of publication, is printed at the end of the text as the first part of the bibliography. Other illustrations are drawn from such widely scattered collections as the National Museum of Mexico, the British Museum, the Trocadero of Paris, and the *Museen für Völkerkunde* at Hamburg, Berlin, Leipzig and Stuttgart. A list of historical sources, French, Spanish, and Latin with the latest English and German monographs along special lines of research are also included in the bibliography.

Two good maps of Aztec Mexico have been added. The book is printed in clear type on highly calendered paper and, all in all, forms a fine example of the care, scholarly accuracy and good taste with which German scholars and German publishers prepare even their elementary text-books.

J. P. HOSKINS

PRINCETON UNIVERSITY

MESOPOTAMIAN ORIGINS: THE BASIC POPULATION OF THE NEAR EAST, by *Ephraim A. Speiser*. Pp. 198. University of Pennsylvania Press (Philadelphia, 1930). \$3.00.

Professor Speiser's book is most admirable for its lack of dogmatism, for the caution with which its tentative conclusions are stated, for the scrupulous fairness with which evidence or the opinions of others which conflict with these conclusions are presented. Its author is clearly open-minded, and exhorts his readers to be open-minded also. It is a difficult book to read, because the problems with which it deals are most difficult in themselves, and because our present knowledge of these remote periods is most incomplete, the evidence for definite conclusions of any sort is most meager. But this book is very keen in its analysis of what evidence there is, and most stimulating in its suggestions as to the course which inquiry may take in the near future with some hope that we shall thereby discover a good deal that is really important, as well as interesting to a few specialists. For such investigations concern the history of the human race in the earlier stages of what we call civilization.

By a study, along parallel lines, of archaeological and of linguistic evidence Professor Speiser has reached the conclusion that before the coming of the Sumerians, the Semites or the Indo-Europeans, the mass of population in the Near East was in the main composed of groups so closely related that they seem to have belonged to a single stock. For this stock he recommends for practical reasons the name Japhetic or Japhethite, originally proposed by Nicholas Marr. This name is not otherwise preëempted, it is entirely vague as yet, and has no geographic or other connotations. Of this stock "the peoples of the Zagros, among whom the Elamites, the Lullu, the Gutians and the Kassites were the most prominent," constituted an eastern, the Hurrians a western division. Speiser considers that an ethnic relation between the Hurrian and the Elamite families may now be regarded as reasonably certain. The languages of both seem to have left structural survivals among the modern inhabitants of the Caucasus.

The oldest pottery yet discovered in Hither Asia is from the western border of Elam. It is hand-made and primitive; its makers were a strictly stone-using people. What the relation of this culture is to those later remains uncertain. After a time it was replaced by an "aeneolithic" civilization in two stages, designated respectively Susa I and Susa II. The first of these belonged to the fourth millennium B.C., being earlier than the first dynasty of Ur. It extended from the Habur, a tributary of the Euphrates, across Mesopotamia and Elam to Baluchistan. The chief centre of this civilization, outside of Elam itself, appears to have been in Sumer. The study of place-names in this region shows the existence of Elamites in Lower Mesopotamia at a period which was considered pre-diluvian by the Sumerians themselves. Thus the possessors of the civilization called Susa I appear to have been Proto-Elamites. The most characteristic product of this culture is a type of painted pottery, decorated with geometric designs combined with highly stylized representations of natural objects. "The whole has an abstract, one might say expressionistic effect," and the subordination of the individual motives to the main, purely decorative, scheme is admirable.

Probably towards the close of the fourth millennium the First Aeneolithic Culture disappeared from Sumer, and the first town at Susa was destroyed. Apparently these events coincide with an invasion of Hurrians from the West and the arrival of the Sumerians at the head of the Persian Gulf. About the same time also the Semites arrived, possibly in the wake of the Hurrians. These Hurrians seem to have been the creators or possessors of the culture designated as Susa II: its designs are not abstract or stylized or decorative, but realistic.

These conclusions are supported by the evidence throughout the Near East, from the end of the fourth millennium onward, of customs, legends and a somatic type, which are not Sumerian or Semitic or Indo-European.

The Hurrian-Elamite group of peoples seem to have belonged to the so-called "Alpine Race." The common ancestors of this group spoke a language the nearest living descendants of which may yet be found in the Caucasus. Probably there is some relation between this people and other "Alpine" groups in the West, and possibly also a connection with some Mediterranean peoples.

This last conclusion is not irreconcilable with some of the most recent work on the prehistoric ethnology of Southern Europe. Professor Joseph Karst, in a series of articles under the title "Prolegomena Pelasgica," in his "Alarodiens et Proto-Basques" (Wien, 1928), and in his "Grundsteine zu einer Mittelländisch-Asianischen Urgeschichte" (Leipzig, 1928), claims to have proved the homogeneous ethnic connection of a chain of Proto-Ligurian, Illyrian, Lelegian "Urvölker," which extended westwards in the Basques and eastwards in the Proto-Phrygians and Alarodians. With these studies may be compared a recent pamphlet by F. G. Gordon entitled "Through Basque to Minoan" (Oxford University Press, 1931).

WILLIAM K. PRENTICE

PRINCETON UNIVERSITY

May 7, 1931

LES LIGURES COMME SUBSTRATUM ETHNIQUE DANS L'EUROPE ILLYRIENNE ET OURALO-HYPERBORÉENNE, by Joseph Karst. Pp. xx+143. Heitz et Cie, Strasbourg, 1930. 120 francs.

Professor Karst here sets forth a theory of the pre-history of the peoples of the countries surrounding the Mediterranean: Two ethnic elements, one Hyperborean or Proto-Uralic, the other Liby-Ethiopic or Proto-Hamitic, mingled in Asia Minor, and spread thence as far as the Baltic, Britain, and the Iberian peninsula; the Ligurians were those with stronger Hyperborean admixture, while the Iberians were those with stronger Liby-Ethiopic strain, represented today notably by the Basques. A later mixture with an Indo-Europeanizing stock took place, before the appearance of the true Indo-Europeans.

Such, in brief, is Professor Karst's theory, divested of details (summary on pp. 82-84). His argument is here based entirely on linguistic evidence; the archaeological evidence was utilized, he says, in a previous volume entitled *Grundsteine zu einer mittelländisch-asianischen Urgeschichte* (Leipzig, 1928). His method is to compare and identify ethnic names and to equate Basque words with those of other languages. Thus we are told (p. 2) that *Liguria*, *Illyria*, *Locri*, *Leleges*, and (Welsh) *Lloegr* are etymologically identical as to root and significance; and similarly (pp. 88-89) that *Prisci* (*Latini*), *Falisci*, *Pelasgi*, *Phryges*, and some other words belong together.

Using Basque as a pivotal language, Professor Karst presents equations of Basque and Albanian words (pp. 10-23), of Basque and Rhaeto-Romanic (pp.

45-46), of Basque and Germanic (pp. 51-57), of Basque and Balto-Slavonic (pp. 60-65).

Now it is fundamental in linguistics that direct comparison of modern forms between languages known not to be closely akin within recent times, is absolutely unwarranted: one would otherwise equate Latin *habere* and English *have*, Latin *deus* and Greek *θεός*, Greek *θῆρ* and English *deer*, French *feu* and German *Feuer*, English *heart* and Sanskrit *hṛd-*, though not one of these equations is valid. One must trace the words of each language back as far as possible before beginning the comparison; and Professor Karst has done very little such backward tracing. Besides this, linguistic kinship is no proof of ethnic kinship; consider the millions of African Negroes in the United States, speaking English as a result of environment, not of heredity.

So far the argument results in a non sequitur merely; and the reviewer does not know Basque and Albanian. But in looking over the lists of words, he notes a number which bear obvious traces of having been borrowed from Latin and are, therefore, not indigenous, and even more words which are equated though bearing very slight phonetic resemblances to each other. He is inclined therefore to throw the entire series of comparisons out of court, for these various reasons; and the more so when he finds some really absurd etymologies. For example, English *esquire*, defined as "l'ancien attribut militaire des Britanniques," is said to have nothing to do with Mediaeval Latin *scutarius*, but to be kindred to Basque *escuara* "noble"; *Yankee* or *Jingo*, "usité depuis des temps immémoriaux chez les nations anglo-saxonnes-britanniques, comme une sorte de fossile antédiluvien, dont l'origine est effacé, bien entendu, dans la tradition," is said to come from Basque *yainko*, *yinko* "God" (pp. 75-76). These are perfect absurdities, since none of these three words has any antiquity in English. Again, Professor Karst asserts that the name *Tusci*, written *Τούσκι* in Greek, does not go back to an earlier form *\*tursci*, but never had any *r*; and he bases a whole argument on the absence of the sound. Apparently he is ignorant of the writings *Tursum* and *Tursee* in the Umbrian Tables of Iguvium, alongside other instances without the *r*.

For these and similar reasons, the reviewer feels that whether or not Professor Karst's theories be right, the arguments advanced in this volume do not lend them support.

ROLAND G. KENT

UNIVERSITY OF PENNSYLVANIA

ÉTUDES TOPOGRAPHIQUES SUR LA MESSÉNIE ANCIENNE, by Mattias Natan Valmin. Pp. 234, 42 ills., 1 map. Lund, 1930.

Those who feel an urge to clutter up the endless topographical literature of classic lands would do well to observe the example of Dr. Valmin before doing anything irreparable. He has carefully digested the entire body of ancient sources; acquainted himself fully with the voluminous works of modern criticism; excavated at several localities, and published his results with commendable promptness (*Bull. Lund*, 1926-27, 53 ff.; 1927-28, 171 ff.; 1929-30, 1 ff.); discovered and published with a useful commentary 44 inscriptions; taken numerous really illuminating photographs; visited the country no fewer than five times during the period 1926-29; and, finally, set forth his results fully, modestly, and in admirable temper. It need hardly be added that here is something with which future studies may very well start; that it belongs to that kind of research in this field of which there is ordinarily a somewhat plentiful lack.

Among the more important matters pretty well settled are the location of Andania at a point several miles west of the spot where the ancient name still

survives in Sandani (such shiftings of names are common enough; cf. Atalante from island to mainland in East Loeris; or the notorious case of Calabria); that of Thouria (supported by inscriptional finds); of Pherai at Giannitza (near Kalamai), whose lord, if descended from the river Alpheios, simply must have moved south of his own initiative, or by dislocation, as plenty of other tribes and individuals did in those uncertain days; that of Artemis Limnatis near Nerinda in the Gaitzès region. Messene and the immediate surroundings seem to be left to Dr. Oikonomikos, who has been excavating extensively there. It is a little encouraging, also, in these days of obscurantist Homeric unitarianism, to see the author calmly consider whether the various data to be found in different parts of "Homer" actually agree with established fact, and not devote misspent ingenuity in the search for a certain theological kind of "harmony." Whatever "Homer" wrote, and whenever he did it, he certainly had "sources" and "materials," of different periods and of different value, before him, and it is the meaning and relative value of these data that are of real historical and cultural interest, and not the shadowy personality of a first, or last, or chief composer. All that the appearance of a statement in "Homer" means is that we have a certain piece of evidence, in itself of undetermined value, and datable for the most part only by a *terminus ante quem*—if one could only be certain just where that *terminus* itself actually belongs.

In conclusion one might note a few matters that perhaps could be improved in a further publication, which seems to be hinted at, and for which certainly no one is anything like so well fitted as the present author. In particular the map is disappointing. Several of the conventional symbols employed are not explained, and two or three are not obvious, while there is a very large number of names in the text which one does not find on the map, and this to the very considerable difficulty of following the argument at times. Thus in discussing the location of the temple of Artemis Limnatis, the important terms Sandava, Brinda, Gaitzès, and Zarnata do not appear on the map, and it is of little use to be told that Brinda is 5 km. from Zarnata (187) when neither place can actually be located. Scores of other names similarly fail to appear, as, e.g., a place of prime importance like Pherai itself. Of course all the modern topographical designations could not be printed on the small map at the end, but that is just the point. Once a folding map had to be employed, it could just as well have been five or six times as large as it is; or, better still, separate small maps for specific districts under consideration, scattered throughout the book, would have greatly increased the practical utility of the study for others who will follow in the author's footsteps. I regret also to see no indication of the route of the famous Langada pass, which went through Lada (or Ladhi as they called it when I was there), and a rather slight discussion of it, as well as of other presumably ancient routes.

A little more consistency in spelling might easily be attained, without verging upon pedantry. Thus the same place is called Kalamata, Kalamai, and Kalamai repeatedly, and the same is true of Mothon and Mothoné. There is an excellent index and a very full bibliography, where, however, one is surprised not to see listed T. W. Allen's *The Homeric Catalogue of Ships* (1921) instead of merely his earlier article on the same topic. In this connection I might say that the map would probably have been improved by the use of the British Admiralty Charts, of which No. 207 includes most of the coast and neighboring districts of ancient Messenia, and No. 682 the region about Kalamai on a much larger scale. These maps are the last word in topographical accuracy, and are indispensable for any part of Greece lying on the coast. Considerable useful information can also be secured from *The Mediterranean Pilot*, published likewise, from time to time, by the British Admiralty. Since Messenia has never particularly attracted my



attention, I cannot say when the latest edition of the *Pilot* treating of that region is dated, but I happen to recall that the 14th edition, 1908, together with a *Supplement No. 2*, of 1914, contains not a little highly accurate and authentic topographical data. The short list of *Errata*, I might add, could also be very markedly extended. But all these are the merest trifles, and deserve mention only as suggestions for incidental improvement of a further study to which we look forward.

W. A. OLDFATHER

UNIVERSITY OF ILLINOIS

THE THIRD WALL OF JERUSALEM, by E. L. Sukenik and L. A. Mayer. Pp. 72 with 10 plans. Translated from the Hebrew; published by the University Press, Jerusalem, 1930.

For more than a century individual bits of Roman masonry north of Jerusalem and a short distance outside the main walls of the city have provoked comment on the part of travelers and archaeologists. Some have seen in them remnants of the ancient outer wall constructed by Herod Agrippa (40-44 A.D.) according to Josephus. Others have violently denied this identification.

In 1925, during repairs to the Nablus Road, additional sections of similar masonry in line with the traditional fragments and this time definitely *in situ* came into view. The Palestine Jewish Exploration Society took occasion to follow out the line of the masonry indicated through the open territory east and west of the road. Work by the municipality upon the Saladin Road, and excavations for the foundations of a private building in the immediate vicinity, contributed in subsequent years to extending the area of the scrutinizable territory. As a result we know of the existence of a straight, though broken line of heavy dressed and bossed stones, extending some 500 metres west from the courtyard of the American School, which can be nothing else than the remains of a defensive wall. Remains of towers, cisterns, a few bits of later mosaic and four inscriptions also came to light.

The Hebrew University which has stood behind these excavations is to be congratulated, together with the excavators and authors, for having been so prompt in taking up the work, and for publishing the findings in such careful and creditable fashion.

Aside from the question of the eastern terminus of this outer wall, two problems arise: first, was the wall built by Agrippa or by Bar Kochba at the time of the latter's revolt (131-132 A.D.), and, second, did the wall turn south immediately in front of the American School to join the main wall directly, or did it continue over to the summit of the hill between the School and the Kidron valley, and then turn south to join the main defense at its extreme northeast corner? The excavators have chosen the first alternative in answering each of these two questions. Père Vincent opposes their choice in considering the first question on the grounds that the slovenly foundations of the wall indicate great haste in construction and lack of regal supervision. The answer here seems to be that the stones of the superstructure are too carefully cut for hasty defenses such as Bar Kochba may have erected, and that Agrippa was probably also in haste to accomplish results before the restraining hand of the Emperor might interfere in the way it subsequently did. Military strategy is invoked by Dr. Romanoff to argue against the authors' choice in their answer to the second question. Soundings made at the first tower west of Herod's Gate in the main wall have showed that certain stones of the lowest course project out of line in the direction of the new outer enclosure. The illustration (fig. 27) does not give a sufficiently clear picture of the projection



for anyone at this distance from the site to deny or affirm that these stones represent the point of juncture of the outer wall with the main defense.

CARL H. KRAELING

YALE UNIVERSITY

FOUNDATION FIGURINES AND OFFERINGS, by *E. Douglas Van Buren*. Pp. xvi + 81, pls. 20 and a frontispiece. Berlin: Hans Schoetz & Co., 1931. 40 M.

Once more Mrs. Van Buren has laid scholarship under her debt by assembling and discussing in chronological order the offerings found in the foundations of temples and public buildings in Mesopotamia. While the existence of these objects has been well known, this is the first comprehensive study devoted to them.

The enumeration of the chapters will give some idea of the scope of this little book. After a short Introduction, they take up, usually quite briefly, the Prehistoric and Archaic Periods, the Age of Gudea, the Third Dynasty of Ur, the Kings of Larsa, and the Kassite, early Assyrian, Assyrian, Babylonian, and Late Babylonian periods. The book ends with a Conclusion summarizing the results of the investigation.

Mrs. Van Buren shows that these offerings have, as is to be expected, a religious and apotropaic significance—that they are placed in the foundations not merely to protect the house and its builders, but, more than that, actively to avert evil. They begin with representations of the door-posts, but these quickly become anthropomorphized, and gradually turn into "Guardians of the Gates," often holding the door-post in their hands. We also find animal figurines, particularly of dogs, whose purpose is to defend the house and attack its enemies.

Too much cannot be said for the care and thoroughness which Mrs. Van Buren has shown in the preparation of this book. Under the heading "List of Abbreviations" (pp. xi-xiv) she gives an exhaustive bibliography, to which constant reference is made in the abundant footnotes throughout the text. If we find the abbreviations slightly confusing at times, it is probably our own fault; but there does seem to be an overemphasis on initials, whereas giving part of each word of the title would often have simplified the reader's task.

Mrs. Van Buren might well have cited, as an illuminating parallel, that this custom persists into modern times; and that depositing coins, postage stamps, newspapers, etc., in the ceremony of laying a corner-stone, and sealing them up in a cavity in the stone prepared for the purpose, while in no sense any longer apotropaic, may perhaps be said to be a survival of some such religious custom as she has shown to exist in Mesopotamia.

Finally a word of praise must be given to the technical aspects of the book. Although printed in a country where English is a foreign language, it is admirably proof-read, and a careful examination revealed no typographical errors. The type is large and clear, the paper excellent, and the plates beautifully executed. The binding is strong and supple, although rather startling in color.

STEPHEN BLEECKER LUCE

RHODE ISLAND SCHOOL OF DESIGN  
Providence, R. I.

THE RELIGION OF ANCIENT PALESTINE IN THE LIGHT OF ARCHAEOLOGY, by *Stanley A. Cook*, M.A., Litt.D., Fellow of Gonville and Caius College; Cambridge University Lecturer in Hebrew and Aramaic. (The Schweich Lectures of the British Academy, 1925.) Pp. xv + 252, pls. 39, maps. Published for the British Academy by Humphrey Milford, London, 1930. \$4.75.

More than twenty years ago the late Prof. Samuel R. Driver published his

*Modern Research as Illustrating the Bible.* It was suggested that Dr. Cook should give some account of the work in this field subsequent to 1908, the year when Driver's book was published. The book before us is the substance of Dr. Cook's 1925 lectures enlarged and annotated in order to present a complete and scholarly volume on the subject. The resultant work by one of the foremost authorities in the English-speaking world is a volume which no student of the Bible or of the religion of the Near East can afford to ignore.

Dr. Cook groups his material in three chapters, the first of which he entitles "Miscellaneous examples." In this chapter, after defining archaeology and its value, he has collected the information which archaeology has thrown on geographical and cultural relations of Palestine; its chronology; on stone cults, cup-marks; rock altars; stones, altars, etc., for deities or the dead; seats for deities, the "empty throne"; triads, stones with symbols; steps and ladders, bulls and altars; horns as symbols; conveyance of deities or their symbols; care of the dead; meals with deities or the dead; theophanies; protection of worshippers, deities and kings; the *ankh* or sign of life; the winged solar disk; wings of deities, cherubim, etc.; sphinxes and other Egyptian elements; Harpocrates and the lotus; animals; cult-scenes; conflict-scenes; victory and reward. From this enumeration it will be seen that the chapter deals with a large variety of incongruous elements which can in no way be moulded into a historical whole, but information about which is of the greatest importance.

The second chapter is entitled "The Old Oriental Period," and contains a sketch of the religion of Palestine as revealed in archaeology from pre-historic times down to the Hellenic conquest. In this chapter the work of Macalister at Gezer and of Rowe at Beth-Shan and of other archaeologists is freely drawn upon. Especially interesting here is his discussion of the Hebrew pantheon at Elephantine and of a South Palestine coin dating from about 400 B.C., bearing the name Yahu in Aramaic lettering.

To one accustomed to interpreting the religion of the Hebrews almost wholly from the Old Testament the chapter gives a new and valuable perspective. It doubtless will open the eyes of many to a new appreciation of the heathen environment in the midst of which the Old Testament was developed.

The third chapter is devoted to "The Graeco-Roman Age." Here Cook has availed himself not only of archaeological material from all sources, including coins, but of the works of many Hellenistic writers as well. Like Chapter II, the collection of the material presents a view of the environment of late pre-Christian Judaism, of early Judaism and Christianity that is of the greatest value. The discussion includes the Mosaic floors of Jewish synagogues, the Mosaic map of Medeba, and the various cults of Heliopolis and other ancient centres which continue into the Byzantine period. The book concludes with a brief estimate of the characteristics and individuality of Palestinian archaeology.

Ten pages of bibliography on the subject follow, together with a chronological table and general index, and thirty-nine plates showing a great variety of illustrative archaeological material, and two maps of Palestine and neighboring countries at different periods.

Dr. Cook has laid all students of the Bible and of the history of religion of the Near East under great obligation by the publication of this volume, and it should be in the library of every scholar whose subject touches in any way the various problems which it discusses.

GEORGE A. BARTON

THE UNIVERSITY OF PENNSYLVANIA

ATTIC VASE PAINTINGS IN THE MUSEUM OF FINE ARTS, BOSTON, Part I, pls. I-XXX, by L. D. Caskey, Curator of Classical Antiquities, with the coöperation of J. D. Beazley, Lincoln Professor of Classical Archaeology in the University of Oxford. Published for the Museum of Fine Arts, Boston, by the Oxford University Press, 1931.

In this portfolio of thirty superb Plates illustrating sixty-five vases, with accompanying text, Dr. Caskey issues the initial portion of a publication which has been planned to include all the Attic vases in the Museum of Fine Arts that seem to him worthy of full-size reproduction. In Part I, now published, he has concentrated his attention on vases of the period 530-430 B.C., including red-figured and white ground vases, arranged chronologically in several clearly defined groups. In the first four Plates are presented early archaic vases produced between 530-500 B.C. These include plates by the Kerberos painter, the Menon painter and a plate attributed to Euthymides; nine kylixes, attributed respectively to Epiktetos, the Elpinikos painter, the Hemaïos painter, the Euergides painter, the Triptolemos painter and one by an unrecognized hand; two lekythoi, one by the Gales painter. The turn of the century is represented in Plate V by the well-known amphora showing an athlete with hare by the Kleophrades painter. The succeeding ten Plates consist of vases by the Brygos painter and his school, covering the period of 490-470 B.C. Thirteen are attributed definitely to the Brygos painter, and six are given to his followers, including the painter of the Paris Gigantomachy and the painter of the Berlin Foundry kylix. Plate XV shows two polychrome vases of the decade 460-450 B.C.: the charming covered kylix showing Apollo revealing himself to a Muse, attributed by Professor Beazley to the Carlsruhe painter, and the pyxis showing a cowherd and muses. Six Plates are devoted to works of the group of the Villa Giulia painter, comprising six vases by the Chicago painter and four by the Euaion painter. The next nine Plates include eighteen vases by the Achilles painter and his group, covering a period of about thirty years, 460-430 B.C. Eight are assigned to the Achilles painter himself, three to the Dwarf painter, two to the Thanatos painter, three to the painter of the Boston phiale, and there is one unassigned lekythos in the style of the Achilles painter's earliest manner. The last Plate in the portfolio is given to a squat lekythos attributed to the Eretria painter and dated 430 B.C.

The vase paintings are reproduced in complete view and in detail, there being altogether one hundred and twenty-four collotype illustrations. They are based largely on excellent photographs, though in a number of cases the camera's work is supplemented by precise drawings which more nearly duplicate the vision of the travelling eye and correct the distortion of curvature. In the text are incorporated thirty-five drawings, twenty-nine of which are outlines of shapes or vases in cross section. Bound in the folio of text are three supplementary Plates, exhibiting half-tone reproductions of photographs of ten vases.

In the fifty-seven pages of text, Dr. Caskey answers nearly every query which can occur to the student *in absentia*. The attributions are wholly Professor Beazley's, as Dr. Caskey makes clear. For the plan and contents of the text, however, Dr. Caskey assumes full responsibility, and it shows his usual thorough scholarship. In the case of each vase, after the preliminaries of type, subject matter and size are given, the condition of the vase is precisely reported, its shape considered and compared with other vases of its type, often by means of diagrammatic drawings, the technical details of the painting are discussed, and the provenance and history given. Then, after the bibliography, follows a full description, detailed and interpretative. With the place of a vase in the development of painting designated and comparison with related vases made, the discussion is

completed by the assignment of a date and painter, with perhaps a few remarks on the painter's style or the bases of attribution.

So adequate are the Plates and so complete is the text in this publication on Attic vases of the century of their highest development, that the volume will prove invaluable to all students of Greek vase painting and will be a boon to scholars whom distance bars from ready access to the originals.

MIRIAM A. BANKS

MUSEUM OF THE RHODE ISLAND SCHOOL OF DESIGN

AISON ET LA PEINTURE CÉRAMIQUE À ATHÈNES À L'ÉPOQUE DE PERICLÈS, par Charles Dugas. Henri Laurens, Paris, 1930. 12 francs.

This little book by Mr. Dugas of the University of Lyons may be considered as a sequel to another work in the same series, Pottier's *Douris et les peintres des vases grecs*, as it takes up the story of Greek vase painting where Pottier leaves it, and carries it down to the end of the fifth century. Aison is only one of the painters treated: in the midst of the prevailing anonymity of later fifth-century vase painters, his name stands out as a convenient peg upon which to hang the title of the book.

Unlike Dugas' earlier book on Greek vase painting his present study contains excellent illustrations, mostly from photographs,—some of them, as such, published for the first time. Among these are the Kodros cup in Bologna, Aegeus consulting the oracle, the two charming little vases in Athens and Berlin by the Eretria Painter, and the Atalanta krater in Bologna. There are some variations from Beazley's attributions: the Kodros cup in Bologna is assigned by Dugas to Aison instead of to Beazley's Kodros Painter, as are the banquet cup in London (E82), the Aegeus cup in Berlin (2538), and the Rape of Cassandra in the Louvre (G458). Beazley has called the painter of the Bologna krater, with preparations for Atalanta's race, the "Painter of the Berlin Dinos"; Dugas has followed Pfuhl in calling him the "Atalanta Painter," and assigns to him also, very strangely, the Arezzo amphora with Pelops and Hippodameia, usually attributed to the Meidias Painter. In other cases the nomenclature is generally accepted: the Achilles Painter, the Kleophon Painter, the Eretria Painter, and the Meidias Painter. The museum numbers should have been given in the titles below the illustrations.

Since, however, the book is clearly intended for the general reader, and the casual art student, the foregoing observations have little weight. In compensation, the analysis of individual compositions and figures shows more aesthetic appreciation than is usual in books of this kind. References are made throughout to the parallel development in monumental painting and sculpture, of which these vase-paintings are frequently an echo.

J. S. GREEN, JR.

UNION COLLEGE

Schenectady, N. Y.

LE GUIDE DI ROMA, by Ludwig Schudt. Materialien zu einer Geschichte der römischen Topographie. Unter Benützung des handschriftlichen Nachlasses von Oskar Pollak. Pp. xx+544. Wien-Augsburg. Filser Verlag. 1930.

This opulent and careful work, though modestly offering itself merely as a bibliography, upon closer scrutiny proves—especially through its long Introduction—to be a welcome contribution to a better understanding of the part played by the Eternal City in the culture of Europe from the Renaissance to the nineteenth century. We are made aware through the author's analysis of the "guide"

—the guide-books of Rome, written almost exclusively in Italian—published since the invention of printing, how closely these books, great and small, follow the changes in the intellectual life. The pilgrims of the Middle Ages cared only for ecclesiastical information. But something new appeared when no less a person than Andrea Palladio in 1554 published his "*Descrizione de le Chiese, Stationi, Indulgenze e Reliquie de Corpi Sancti, che sonno in la Città di Roma.*" Here piety began to strike hands with a more mundane interest in art. During the great architectural activity which after the sacco di Roma (1527) followed under Sixtus V and his successors, when Rome began to assume a new face, when furthermore enthusiasm for every manifestation of the artistic impulse grew paramount, the need of a wholly new set of "guide" became urgent. The comparatively meagre town of the old "*Mirabilia*" had quickly grown into a metropolis of imperial distinction and multitudinous appeal to clerk and layman alike. Pompilio Totti's "*Ritratto di Roma moderna*" (1638) and Titi's "*Studio di pittura, scultura et architettura*" (1674) may here be mentioned as particularly significant. The eighteenth century with its ideal of an all-embracing culture—best reflected in its love for encyclopedias—needed richer and more many-sided "guide" than were even Totti's and Titi's. This is proved beyond a peradventure by the sixth, seventh, eighth, and ninth editions of Rossini's "*Mercurio errante*" (1739-1771). Towards the end of that century and at the beginning of the nineteenth the character of the "guide" again undergoes a significant change. On the one hand the creative impulse in architecture had much abated, on the other the number of cultivated and half-cultivated travellers was swelling year by year. Under these circumstances nothing essentially new had to be recorded. The aim must be rather to satisfy the practical needs of the visitors. Influenced by such considerations Vasi published his "*Itinerario istrutivo*" which between 1763 and 1894 went through some fifty editions and became the forerunner of our modern "*Baedekers*."

Even this meagre sketch—in which I have omitted all mention of the lesser "guide" discussed by Dr. Schudt—will give some idea of the importance of the work before us as a contribution to the study of European culture. Its value is enhanced by additional detailed treatment of books on the topography of Rome (from Albertini's "*Opusculum de mirabilibus Novae et Veteris Urbis Romae*," 1510, to Nibby's "*Topografia fisica del suolo di Roma*," 1838 ff., and especially to Platner, Bunsen and others' "*Beschreibung der Stadt Rom*," 1829-42), of the "guide" meant exclusively for pilgrims, of several didactic works, and of the contributions of great antiquarians. The "*Closing Remarks*" concisely integrate the books discussed with the regnant intellectual forces. We meet here with names of resounding fame: Palladio, Montaigne, Goethe. In speaking of Goethe's "*Italian Journey*" stress should have been laid on the fact that here for the first time a description of the physical environment is introduced to help explain social and artistic phenomena and that Goethe thus becomes the great forerunner of Taine. After this "*Schlussbetrachtung*" follows the bibliography proper (pp. 18-518).

It is to be hoped that this admirable study will find its way into the hands not merely of historians of civilization, historians of art, and archaeologists, but of lovers of Rome outside of the world of scholarship. It will prove of interest to all these groups.

CAMILLO VON KLENZE

MUNICH

BYZANTINE GLAZED POTTERY, by *D. Talbot Rice, M.A., B.Sc.* Pp. xii + 120, pls. 21 (5 pls. and frontispiece in color). Clarendon Press, Oxford, 1930.

"Byzantium is the name written over one of the uncharted regions on the map of ceramic history," declares Bernard Rackham in his introduction to Mr. Rice's study, and the truth of the statement is best attested by the paucity of scholars qualified to dispute it. For long both aesthetes and archaeologists have spurned this phase of that great mediaeval culture—a procedure most unreasonable in the case of the former, most unscientific in that of the latter and for both, reprehensible. Outshone by the more striking ceramic remains of neighboring countries and the more conspicuous relics of its own, Byzantine pottery has attracted but few investigators until recently, notwithstanding the fact that in it can be read valuable commentaries upon the civilization of the time and the answers to questions which bear upon various elements of it. Not that Mr. Rice has been able to accomplish all this or even a large part of it; rather than a compositor he is a proposer of problems, and as one of the pioneers in the field his purpose is to encourage the collection and study of more material toward the realization of that value which it possesses potentially but whose present usefulness is conditioned by its small quantity.

Such is the gist of the remarks of the Deputy Keeper of Ceramics of the Victoria and Albert Museum which form a very fitting prologue to Mr. Talbot Rice's excellent treatise. There follows, by Mr. Rice, a brief Introduction in which is summed up the status of our knowledge, more correctly, of our ignorance of pottery between the disappearance of the Roman and the appearance of the glazed Byzantine wares. The next section, dealing with Classification and Discussion (pp. 5-51), forms the heart of the book wherein all the known wares are classified, described and, as far as possible, dated. The study is continued by the separate consideration of the Forms (p. 52), Designs (p. 60) and Monograms (p. 74); under Geographical (p. 80) a few words are said about the distribution of the different wares, while the Problems (p. 82) of the origin and spread of style and technique are discussed more fully. Appendices contain additional notes on Island Ware (p. 99) and a valuable list of Collections (p. 101), while the Bibliography (p. 105), a Table of Concordance (p. 108) of previous classifications, a Table of Dates (p. 109) of the later Byzantine dynasties, full Descriptions of the Plates (p. 111) and the Index (p. 117) unite in making this a most excellent and useful volume.

The classification adopted here is, through its greater completeness, more authoritative and, because of its greater simplicity, more sound than any so far advanced, even more so than that which the author used in publishing the pottery from the British Academy excavations in Istanbul. Two large divisions are recognized and each is subdivided: the one, Class A, into five main and two subsidiary; the other, Class B, into five main and three subsidiary groups. A threefold distinction determines the major grouping: Class A is characterized by "a somewhat sandy paste on which a covering of tin glaze is laid directly, without the use of a slip"—the word *Faience* is employed as a handy name for it; Class B is "a red or white ware of soapy texture, overlaid by a slip before being glazed with lead enamel"—for convenience this is called Earthenware. Such differences, howsoever fundamentally correct, can hardly be expected always to be individually applicable; quality of glaze varies and becomes inconclusive, and even more fickle is the consistency of clay which so often heeds no definition; of the three, the presence or absence of a slip is and must remain the most certain criterion.

Group A1, the Polychrome Ware, which includes the interesting revetment plaques, is the earliest as well as the finest of the products of the Byzantine potter and deserves a place with the already famous creations of Persia and Syria. A2,



the rare and distinctive Petal Ware, may attest a link with Roman pottery, while in A3, Plain Glazed Ware, we have undecorated vessels of more humble purpose. Group A4, White Inscribed Ware, shows the sgraffito technique applied to the faience class and is of value because of the occurrence of inscriptions; A5, White Ware, Impressed Design, one of the better known wares, offers some fine examples of the stamp technique. The two subsidiary groups are A6, Models, under which a few clay toys in the shape of animals find place, and A7, Icons, where the rare and beautiful painted pottery icons are discussed, more examples of which, it is to be hoped, future excavation will bring to light.

The Earthenware, B Class, comprises, if not the more beautiful, at least the more common and so, for the archaeologist, more interesting specimens of Byzantine pottery, namely, the glazed wares with sgraffito decoration through a white slip. Group B1 is the Early Sgraffito Ware with fine, line incisions, in contrast to which B2, Elaborate Incised Ware, shows a similar though distinctive development in which larger portions of the slip are removed, while a combination of painted and sgraffito decoration produced B3, Late Sgraffito Ware, the widespread "Mediterranean" ware. Purely painted pottery, without sgraffito, occurs in the B wares and forms Group B4, White Painted Ware, and a peculiar style of decoration in paint is represented by the Marbled Ware of B5. The three remaining groups, B6, Samsoun Ware, B7, Deep Green Glazed Ware and B8, Turkish Incised Ware, are restricted in distribution and so of less general significance.

The major part of Mr. Rice's task is completed with the classification of the pottery types, but he does not neglect the important considerations of forms of pots and the even more significant designs; it is to be hoped that his discussion of the latter will encourage comparative study of Byzantine designs used in architecture, textiles and ceramics. Such a comparison would be of value in solving some of the Problems. In the discussion of these the author presents an unbiased and, as far as known facts permit, a comprehensive survey of the possible origins of the several groups. Egypt seems to be the greatest contributor, and after her Persia and the Far East, although the influences are not by any means one-sided. A most provocative comparison is the one drawn between the polychrome ware, A1, and ancient Assyrian wall decorations; Mr. Rice is well aware of the chronological difficulties, venturing the suggestion of some connection very cautiously, and it will be interesting to see whether future excavation reveals some tangible evidence for it. We cannot agree, however, in defining "style" as "that indescribable factor," as is done in passing on page 97; the term, whose denotation varies so greatly with the individual, must be described specifically before it can be employed as current in scientific parlance. Loose use of it has resulted many times in the waste of much good ink, and even in this volume the discussion of the problems would be more clear and conclusive were this word "style" limited by strict definition and example in each of its various applications.

It is only minutiae which call for a little adverse criticism and correction. In the Note on Descriptive Terms the use of "enamel" to describe the coating of the Earthenware Class is hardly correct; this coating is seldom if ever opaque in itself and is purely a glaze. On the contrary, we should expect to find the combination "tin enamel" and "lead glaze" rather than the reverse. But it seems strange that the glaze of the A wares is called a "tin Glaze"; that of A1 ware is described as "transparent" elsewhere, so that the opaque oxide of tin cannot be present in all the groups of the class. The terms "scrolls," "interlacing rope band," "key-pattern," in the section on Designs, sound rather labored in comparison with the names by which the patterns are known to the Classical archaeologist. A more happy and correct solution could be found than the "below the base" of page 74



while, since the author is an Englishman, we must repeatedly grit our teeth at the studied misplacement of "only" and other adverbs. The elaborate incised ware bearing monograms is, of course, B2 and not A1 (p. 74); the bowl of this group is on Plate XIVa, not XVIa (p. 35); the plate (c) mentioned on page 100 is pictured on Plate XXIa. The index lacks a number of words which should find place there, most noticeable perhaps are "monogram" and "lamp"; indeed the one noteworthy lapsus in this otherwise complete study is the failure even to mention the common glazed Byzantine lamps. To the Bibliography should be added Mr. Philadelphveus' description of some Byzantine pots from Corinth (*Δελτίον τῆς χριστ. 'Αρχ. 'Εταιρείας Περίοδος Β', Δελτίον Πον.* 1923, p. 21); the author cannot be blamed for missing an article published in so obscure and intermittent a bulletin. Likewise to the list of Collections may be added the Monastiraki Museum, Athens, where these pots and some sherds from Thebes are on display.

Mr. Rice deserves praise for having produced a book which is scholarly, usable and attractive. We can agree heartily with the writer of the introduction that "something has been done to make good the negligence of earlier times, when the classical archaeologist cast aside, as too young or too barbaric to be worthy of notice, the remnants of mediaeval culture," and hope that these archaeologists will requite with special attention in the future their heedlessness of the past.

FREDERICK O. WAAGÉ, 3D

AMERICAN SCHOOL OF CLASSICAL STUDIES  
Athens

GREEK LIFE AND THOUGHT, by *LaRue Van Hook*. 3rd printing. Columbia University Press, New York. \$2.50.

This book on Greek life and thought consists of twenty chapters full of useful information on subjects ranging from Greek sculpture to Greek science and including accounts of topography, sports, education, the theatre, drama, literature, religion, philosophy, social and political conditions. In a book of such a compass the exposition must necessarily be an account rather than a discussion, and some of the chapters lend themselves better than others to the summary method. However, in general, Professor Van Hook refers to some larger work with fuller treatment than that to which these short chapters run, and bibliography supplements each chapter. The aim of the book is to present various aspects of Greek life and thought to readers who may or may not be conversant already with Greek and with Greek civilization. Though it is always convenient to be reminded of a fact or a date, serious students of Greek will find much that is familiar and for them elementary in the various chapters, but "What every school-boy knows" is not now known to the average student who enters an American college and often not to the average graduate, and the information which this book offers, even when it is scrappy, is of value.

The tone is didactic and of the lecture-room, and the style academic. This is perhaps unavoidable in setting forth such vast material in less than three hundred pages. But Keats's lovely sonnet surely deserves something better than "Keats waxed enthusiastic over Chapman's laborious Homer." The students who use the book might well have had the sonnet quoted for them. And Swinburne had a higher opinion of Chapman, who, after all, made a great contribution to Elizabethan literature by his translations.

The book has proved itself by the fact that it has come to the third printing. For the next it would be well to change the sentences at the foot of page 87 which make it appear that Mantitheus is apologizing for his long hair as a piece of foppery. The young man is contrasting his own rough and more Spartan appear-

ance with that of those who dress *comme il faut* and speak in soft accents. His argument is that he and men like him who are careless of their dress are often better men and citizens than the fops (Lysias 16, 19).

A point in the bibliography to be amended is the reference to Gilbert Murray's *Rise of the Greek Epic* in the second edition of 1911. The third edition appeared, considerably enlarged, in 1925. Evans' *Later Greek Religion* (1927) should be added to the bibliography on Chapter XVII.

GRACE H. MACURDY

VASSAR COLLEGE

THE ART AND RELIGION OF FOSSIL MAN, by G. H. Luquet; translated by J. Townsend Russel, Jr. Pp. 201, 119 ills. Yale University Press, New Haven, \$5.00.

The first part of the book consists of five chapters on art including the first or orientation chapter. Part II, on religion, consists of a chapter on The Cult of the Dead, one on Religion and Magic and the conclusion.

In Chapter II the author maintains that "Decorative Art rests on the idea that artificial modifications applied to preëxisting objects render them more agreeable to the eye." Primitive jewelry such as pierced teeth, beads and pendants of ivory, bone, antler and stone are examples of decoration applied to enhance the beauty of the human body. These jewels and also tools and arms received decoration in the nature of notches, lines, dots, zigzags, etc. This is followed by figured ornamentation. Figures later degenerate into conventionalized lines and curves.

Chapter III, Realism in Figured Art, discusses two types of realistic representation in paleolithic art, visual realism and intellectual realism. The latter presents features judged essential by the artist and neglects other features considered without interest according to the author. The critic believes the argument for intellectual realism is faulty in that it does not recognize the difficulties an untrained artist encounters in trying to portray his model, for example, in true profile and that lack of the necessary skill would naturally produce details at variance with a sophisticated representation of the same view. Also the paleolithic artist was drawing from memory and could hardly be expected to recall the exact details of a given angle of vision; rather his memory pictures must necessarily be a composite of the various postures the artist had witnessed in his model. Thus the faults of memory combine with lack of technical skill to produce a likeness which the author says presents features judged essential and neglects other features considered without interest. In short the critic believes that the so-called intellectual realism does not exist and that its apparent existence can be explained by studying the subject from the point of view of the uncivilized artist rather than that of a sophisticated, civilized individual.

The Meaning of Figured Art is the subject of the fourth chapter. The author acknowledges that much of the paleolithic art "was a magical operation" and also maintains with Breuil that "If art for art's sake had not come into being, magical or religious art would never have existed. But if magical or religious ideas had not permeated this art for art's sake . . . it would have remained primitive in the extreme."

The Origins of Art concludes the first part of the book, and maintains that the Aurignacian non-figured form is art for art's sake. This shows its beginning in jewelry and non-figured ornamentation of jewelry. Figured art was doubtless preceded by figures accidentally produced and the intentional modification of natural accidents such as odd-shaped rocks to emphasize a recognized likeness to some object or animal.

In the second part of the book the author points out by a survey of most of the

paleolithic sepultures that "in the beliefs of the time, the dead continued a life analogous to that of the survivors subject to the same needs which must be provided for in the same fashion and during which they preserved relations with the living who seem to have been in fear of such and to have taken precautions to protect themselves."

Some examples of Magdalenian art are very probably examples of spell casting and suggest a belief in sympathetic magic, but this explanation does not account for all Magdalenian figured works and is an extremely doubtful explanation for those of the Aurignacian.

This work is better organized and far superior to a later publication by the same author "L'Art Primitif" which covers much the same subject matter. Mr. Russell, the translator, has given us a very readable text and is to be congratulated on his English rendering of some rather difficult passages.

ALONZO W. POND, M.A.

LOGAN MUSEUM,  
Beloit, Wis.

LES XYLOGRAPHIES DU XIV<sup>e</sup> ET DU XV<sup>e</sup> SIÈCLE AU CABINET DES ESTAMPES DE LA BIBLIOTHEQUE NATIONALE, par P.-A. Lemoisne, Conservateur du Cabinet des Estampes. Tome Second. Les Éditions G. Van Oest, Paris et Bruxelles, 1930.

This second volume completes a collection of material which because of its cautious attributions and its beautiful reproductions is a work of first importance to the student of block prints (*cf.* notice of the first volume in *American Journal of Archaeology*, v. 33, 1929, p. 589).

The volume contains descriptions and plates numbered LXIII-CXXX (dated by M. Lemoisne from 1450-60 to the end of the fifteenth century), a list of exclusions (some of too slight interest, some intended as book-illustrations rather than separate prints, twenty-six of later date, and two belonging to the Département des Imprimés), a table of contents of the volume and a Table Générale of the whole work.

The Table Générale groups the prints according to subject: (1) Twenty-one New Testament scenes of Christ and the Virgin, (2) Twenty mystical and symbolical representations of them, (3) Saints (twenty-eight), (4) Miscellaneous scenes ("Les Neuf Preux," "Les Lepreux de Nuremberg," and a set of symbols of the Ten Commandments, the Five Senses, and the Seven Deadly Sins).

This narrow choice of subject, together with the often gruesome treatment and crude workmanship tempt one offhand to describe their public as too lacking in both learning and sensibility to enjoy, as well as too poor to afford the more varied, delicate and skilful illuminated texts of even contemporary manuscripts. Many of these block-prints are beautiful, nevertheless, and all have the charm of antiquarian and iconographic interest.

HENRY B. VAN HOESSEN

BROWN UNIVERSITY



